TIMING OF HEADQUARTERS

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In today’s business world accounting is considered as ‘the universal language of all business’, because it is the medium for reporting financial information about a business entity to users, such as shareholders, banks and managers. A proper accounting system is essential to any business, whether big or small, in order to manage its daily functions and run it successfully. The main obligation of any business is to maximize profits, minimize losses and at the same time maintain its position as a responsible entity within the society.

So, in the current business world, everybody should have the knowledge of accounting discipline irrespective of the job one is doing. Due to the rapid advancement in business activities due to industrialization and globalization, the need for people having knowledge of accounts have increased manifold. It is impossible to survive in today’s advanced business environment without adequate knowledge of basic accountancy.

Especially all business students should have some background in accounting to understand, interpret and present the results of business. Keeping this objective in alignment, this study material is prepared to augment the basic as well as advanced understanding of students in the related aspects of Corporate and Management Accounting.

The Study Material which is divided in two parts covers in the details the concepts of Corporate Accounting in Part – I and discusses Management Accounting and Valuation in detail under Part-II.

Besides, as per the Company Secretaries Regulations, 1982, students are expected to conversant with the amendments to the law made up to six months preceding the date of examination.

The legislative changes made upto April 01, 2018 have been incorporated in the study material. However, it may so happen that some developments might have taken place during the printing of the study material and its supply to the students. The students are therefore advised to refer e-bulletin and other publications for updation of the study material.

In the event of any doubt, students may write to the Directorate of Professional Development, Perspective Planning and Studies of the Institute for clarification.

Although due care has been taken in publishing this study material, the possibility of errors, omissions and /or discrepancies cannot be rules out. This publication is released with an understanding that the Institute shall not be responsible for any errors, omissions and/or discrepancies or any action taken in that behalf.

Should there be any discrepancies, errors or omissions noted in the study material, the Institute shall be obliged, if the same is brought to its notice for issue of corrigendum in the e-Bulletin ‘Student Company Secretary’.
Accounting helps organization in taking management decisions, formation of planning and control system. It also helps expert advice in financial reporting with formulation and implementation of organizational strategies.

A proper accounting system is essential to any business, whether big or small, in order to manage its daily functions and run it successfully. The main obligation of any business is to maximize profits, minimize losses and at the same time maintain its position as a responsible entity within the society.

So, in the current business world, everybody should have the knowledge of accounting discipline irrespective of the job one is doing. Due to the rapid advancement in business activities due to industrialization and globalization, the need for people having knowledge of accounting, especially, Corporate and Management Accounting have increased manifold in light of the rise in the magnitude of financial transactions and its complexities. Moreover, the business scene is now getting dominated by more of corporate sector than sole proprietorship form of business exposed to stringent regulatory framework, which in turn, calls for more scientific approach towards the critical financial facets of the business. It is impossible to survive in today’s advanced business environment without adequate knowledge of basic accountancy.
The financial statements are the end products of accounting process. They are prepared following the consistent accounting concepts, principles, procedures and also the legal environment in which the business organizations operate. These statements are the outcome of the summarizing process of accounting and therefore, are the sources of information on the basis of which conclusions are drawn about the profitability, and the financial position of a company. Hence, they need to be arranged in a proper form with suitable contents so that the shareholders and other users of financial statements can easily understand and use them in their economic decisions in a meaningful way.

The objective of this subject is to make the students understand the statutory provisions regarding preparation of final accounts of companies. After going through this lesson, one should be able to – Familiarize and understand with the requirements of preparation of statement of Profit and Loss and Balance Sheet and how to form a true and fair view of the financial statements.
Accounting as they are the components of Financial Accounting

Cash flow statement is additional information to the user of financial statement. This statement exhibits cash inflows and outflows and cash equivalents. It assesses the ability of the enterprise to generate cash and utilize cash. Cash Flow Statement is one of the tools for assessing the liquidity and solvency of the enterprise.

Accounting Standards (AS) are written policy documents by expert accounting body or by government or other regulatory body covering the aspects of recognition, measurement, presentation and disclosure of accounting transactions in the financial statements. The ostensible purpose of the standard-setting bodies is to promote the dissemination of timely and useful financial information to investors and certain other parties having an interest in the company's economic performance. Accounting standards reduce the accounting alternatives in the presentation of financial statements within the bounds of rationality, thereby ensuing comparability of financial statements of different enterprises.

Cost is a measurement, in monetary terms, of the amount of resources used for the purpose of production of goods or rendering services. Cost in simple words means the total of all expenses. Cost is also defined as the amount of expenditure (actual or notional) incurred on or attributable to a given thing or to ascertain the cost of a given thing. Cost is a generic term and it is always advisable to qualify the word cost to show exactly what it means, e.g., prime cost and factory cost. Cost is also different from value as cost is measured in terms of money, whereas value in terms of usefulness or utility of an article. Marginal costing is a principle whereby variable costs are charged to cost units and the fixed costs attributable to the relevant period is written off in full against the contribution for that period. Marginal costing is the ascertainment of marginal cost and the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable cost.
Management accounting is an applied discipline used in various industries. The specific functions and principles they apply vary based on the industry. Management accounting principles in banking are specialized yet do have some common fundamental concepts which are used whether the industry is manufacturing-based or service-oriented. For example, transfer pricing is a concept used in manufacturing, but is also applied in banking. It is a fundamental principle used in assigning value and revenue attribution to various business units.

Company secretaries, due to their excellence and depth of knowledge in various corporate and related laws, as well as in finance and management disciplines and due to their professional training, are entrusted with several key functions in the corporate sector. The role of a Company Secretary in different management hierarchy varies from the positions held in the organization and the functions looked after by him/her. Company Secretary’s functions encompass a wide spectrum of duties and responsibilities, which, if laid down, would be a never ending list. However, for the sake of brevity, some of the important tasks, generally entrusted to a Company Secretary and satisfactorily discharged by him/her in the Corporate world, are enumerated below.

Company Secretaries also play an important role in the process of conforming to the different statutory/regulatory requirements as prescribed by different authorities. Company Secretaries generally take part in the formulation of various corporate policies for approval by the Board of Directors. Threadbare discussions are held by the Corporate Management Team including the Company Secretary, before any policy is firmed up.
OBJECTIVES

Part I: To provide knowledge and understanding of the concepts, principles and practices in Corporate Accounting and Indian and International Accounting Standards.

Part II: To acquire knowledge and understanding of the concepts, techniques and practices of management accounting and to develop skills for decision-making and to acquire knowledge of the concepts, principles and methods of valuation.

PART I
CORPORATE ACCOUNTING (60 MARKS)

Detailed Contents

1. Introduction to Financial Accounting.
2. Introduction to Corporate Accounting: Records of accounts to be maintained by a company.
3. Accounting for Share Capital: Issue of Shares; Forfeiture and Reissue of Shares, Accounting Treatment of Premium, Buy-back of Shares; Redemption and Conversion; Capital Redemption Reserve, Bonus Shares; Rights Issue, ESOPs, EPS, Sweat Equity Shares; and Underwriting; Book Building.
5. Related Aspects of Company Accounts: Accounting for ESOP, Buy-back, Equity Shares with differential rights, Underwriting and Debentures.
6. Financial Statements Interpretation: Preparation and Presentation of Financial Statements; Quarterly, Halfyearly and Annual Financial Statement pursuant to Listing Regulations; Depreciation provisions and Reserves; Determination of Managerial Remuneration, Corporate Social Responsibility spend, various disclosures under the Companies Act, 2013, LODR & applicable accounting standards; Related party and segment reporting, Audit Queries; How to Read and interpret Financial Statements.
7. Consolidation of Accounts as per Companies Act, 2013: Holding Company, Subsidiary Companies, Associate Companies and Joint Venture; Accounting Treatment and disclosures.
9. **Cash Flow Statements**: Preparation and their analysis.

10. **Accounting Standards (AS)**: Applicability, Interpretation, Scope and Compliance; International Financial Reporting Standards; Overview of AS, AS vs. Ind AS vs. IFRS.

11. **National and International Accounting Authorities**.

12. **Adoption, Convergence and Interpretation of International Financial Reporting Standards (IFRS) and Accounting Standards in India**.

**Case Studies & Practical Aspects.**

| 14. **Cost Accounting Records & Cost Audit under Companies Act, 2013**. |
| 15. **Budget, Budgeting and Budgetary Control**: Preparation of various types of Budgets; Budgetary Control System; Zero Based Budgeting; Performance Budgeting. |
| 17. **Management Reporting (Management Information Systems)**. |
| 18. **Decision Making Tools**: Marginal Costing; Transfer Pricing. |
| 20. **Valuation of Shares, Business and Intangible Assets**: Regulatory Valuations; Companies Act; Insolvency and Bankruptcy Code; Income Tax Act; SEBI law; FEMA and RBI guidelines. |
| 21. **Accounting for Share-Based Payments (Ind AS 102)**. |
| 22. **Methods of Valuation**: Net Assets Valuation: Relative Valuation (Comparable Companies/Transactions); Discounted Cash Flow Valuation; Other Methods. |

**Case Studies & Practical Aspects.**
1. Introduction to Financial Accounting:

Accounting is a very old concept – as old as money. A description of proper keeping of accounts is also found in ‘Arthashastra’ written by Kautilya. However, it has developed with the passage of time to meet the requirements and challenges of ever – growing society. The modern-day accounting concept based on double entry system was originated by Luca Pacioli in Italy. Though the act of accounting is very old, in recent times it has acquired special significance because of rapidly growing economy, cut-throat competition, expanding markets and increasing production and changes in technology.

In this lesson, we will throw light on the basic concepts of accounting, types of accounts, accounting principles, conventions, concepts & accounting standards, meaning of double entry system and the rules of debit & credit on which the entire concept of accounting is based.

Accounting process involves identification and analysis of financial transactions. These transactions are recorded, classified and summarised in a systematic manner to give useful information. Thus, accounting process starts with the recording of business transactions in monetary terms, in the primary books of accounts. For recording business transactions, it is necessary that these transactions are evidenced by proper source documents like cash memos, purchase bills, sales bills, counterfoils of cheques issued, salary slips etc. From these source documents, transactions are recorded in the books of accounts which are the first and major step in accounting. It is the basis of accounting as entire future process would depend upon this recording of transactions. In this lesson, we will know about recording transactions in primary books like Journal and other subsidiary books, posting in ledger and then preparation of trial balance.

2. Introduction to Corporate Accounting:

There is no legal obligation for sole proprietorship and partnership firm to prepare final accounts, but companies have statutory obligations to keep proper books of account and to prepare its final accounts every year in the manner as prescribed in the Companies Act. Chapter IX, Sections 128 to 138 of the Companies Act, 2013 deals with the legal provisions relating to the Accounts of Companies. Final accounts of a company consist of balance sheet as at the end of the accounting period and profit and loss account for that period. Section 129 of the Companies Act, 2013 prescribes the form and contents of balance sheet and profit and loss account of a company. Balance sheet of a company shall be prepared according to Schedule III of the Companies Act, 2013. The Schedule III sets out the minimum requirements for disclosure on the face of the Balance Sheet, and the Statement of Profit and Loss (hereinafter referred to as “Financial Statements”) and Notes. Statement of Profit & Loss of a company shall be prepared according to Part II of Schedule III of the Companies Act, 2013. Section 129(1) of the Companies Act 2013, states that the financial statements shall give a true and fair view of the state of affairs of the company or companies, comply with the accounting standards notified under section 133 and shall be in the form provided for different class or classes of companies in Schedule III.

3. Accounting for Share Capital:

The most striking feature of a company is its ownership structure. The capital in a company is divided into small shares of fixed value. The shares of a company may be equity shares or preference shares. The objective of
this lesson is to make students aware about accounting of different aspects of share capital. After studying this lesson one should be able to:

- Understand the share capital structure in the balance sheet of a company.
- Discuss the methods and accounting procedure of issue of shares.
- Specify the accounting treatment when shares are issued at par, premium and at discount.
- Explain the meaning and accounting treatment of forfeiture of shares and reissue thereof.
- Understand the accounting procedure of buy-back of shares.
- Enumerate the steps for redemption of preference shares.
- Appreciate the purpose of issuing Right shares & Bonus shares.
- Understand the accounting treatment for ESOPs, ESPS, Sweat Equity Shares.
- Understand the meaning of underwriting.
- Familiarize with various types of underwriting.
- Distinguish between marked application and unmarked applications.
- Determine the liability of underwriters.

4. Accounting for Debentures:

Equity sources of financing are however not always sufficient to meet the ever growing needs of the corporate expansion and growth. Hence, corporates turn to debt financing through financial institutions, commercial banks or by issuing debt instruments either through the route of private placement or by offering the same for public subscription. Owing tax shield provided by debt instruments, the debt financing not only helps in reducing the cost of capital but also helps in designing appropriate capital structure of the company. This lesson deals with the accounting treatment of different aspects of debenture and bond especially with issue, redemption including conversion of debenture.

5. Related Aspects of Company Accounts:

The objective of this lesson is to make students aware about accounting of different aspects of share capital and deals with the accounting treatment of different aspects of debenture and bond especially with issue, redemption including conversion of debenture. Understand the share capital structure in the balance sheet of a company. Discuss the methods and accounting procedure of issue of shares. Understand the accounting procedure of buy-back of shares. Understand the accounting treatment for ESOPs and ESPS. Understand the meaning of underwriting. Familiarize with various types of underwriting. Distinguish between marked application and unmarked applications. Determine the liability of underwriters. State the meaning of debenture and bonds; Describe the methods for the issue of debenture for cash and for consideration other than cash; Explain the issue of debenture as a collateral security; Explain the sources and record transaction relating to redemption of debenture; Discuss the methods of redemption of debenture; Record the Sinking Fund Investment transactions; Deal with cum-interest and ex-interest, open market operations.

6. Financial Statements Interpretation:

Financial statements are compilation of financial data, collected and classified in a systematic manner according to the accounting principles, to assess the financial position of an enterprise as regards to its profitability, operational efficiency, long and short – term solvency and growth potential.

Financial statements are basic and formal means through which management of an enterprise make public communication of financial information along with select quantitative details. They are structured financial representation of the financial position, performance and cash flows of an enterprise. Many users rely on
the general purpose financial statements as the major source of financial information and therefore, financial
statements should be prepared and presented in accordance with their requirement. That does not undermine
the dependence of the general users on the information contents of the financial statements.

7. Consolidation of Accounts as per Companies Act, 2013:

A holding company is one which acquires all or a majority of the equity shares of any other company called
subsidiary company in order to have control over the subsidiary company. In order to understand the financial
position of holding company, consolidations of accounts become very vital. After studying this lesson you will
be able to:

- Understand the concept of holding company and subsidiary company.
- Familiarize the legal requirements for preparation of final accounts of holding company.
- Prepare consolidated balance sheet and statement of profit and loss.
- Make appropriate accounting adjustments required for the preparation of consolidated balance sheet.
- Understand the concept of minority interest in consolidation of accounts.
- Appreciate the treatment of pre-acquisition profits and losses of the subsidiary company. Make
  adjustment regarding profit and loss on revaluation of assets of subsidiary company.
- Understand the calculation of goodwill or cost of control.
- Make adjustment for inter-company unrealized profits and inter-company transactions.
- Understand the treatment of bonus issue on consolidation of accounts.
- Make adjustment on dividend received from subsidiary company.

8. Corporate Financial Reporting:

Accounting is a process to identify measure and communicate economic information to form informed judgments
and decisions by the user of the information. Its function is to provide quantitative information, primarily financial
in nature, about economic entities, that is intended to be useful in making economic decisions and related
choice among alternative course of actions. Financial reporting may be defined as communication of published
financial statement and related information from a business enterprise to all its users. It contains both qualitative
and quantitative information.

The Financial Report made to the management is generally known as Internal Reporting, while financial
reporting made to the shareholder investors/management is known as external reporting. The internal reporting
is a part of management information system and uses MIS reporting for the purpose of analysis as an aid in
decision making process.

The management of a corporate is ultimately responsible for the generation of accounting information. The
accountability of a company has two distinct aspects – legal and social. Under legal requirements a company
has to supply certain information to the various users through annual reports and under the social obligation, a
company has to provide additional information to various user groups.

9. Cash Flow Statements:

Cash flow statement is additional information to user of financial statement. This statement exhibits the flow of
incoming and outgoing cash and cash equivalent. It assesses the ability of the enterprise to generate cash and
utilize cash. Cash Flow Statement is one of the tools for assessing the liquidity and solvency of the enterprise.
Cash Flow Statement is considered to be a summarized statement showing sources of Cash Inflows and
application of cash outflows of an enterprise during a particular period of time. It is prepared on the basis of the 
published data as disclosed by the Financial Statement of two different financial periods. It is an essential tool 
for managerial decision-making. Cash Flow reports the management Net Cash Flow (i.e. cash inflow less cash 
outflow or vice versa) from each activity of the enterprise as well as of the overall business of the enterprise. The 
management of the enterprise gets a picture of movement of cash resources from the Cash Flow Statement 
and can assess the stronger and weaker area of movement of cash for different activities of the business for 
drawing up the future planning.

10. Accounting Standards (AS):

Accounting Standards (AS) are written policy documents by expert accounting body or by government or other 
regulatory body covering the aspects of recognition, measurement, presentation and disclosure of accounting 
transactions in the financial statements. The ostensible purpose of the standard setting bodies is to promote 
the dissemination of timely and useful financial information to investors and certain other parties having an 
interest in the company’s economic performance. Accounting standards reduce the accounting alternatives 
in the presentation of financial statements within the bounds of rationality, thereby ensuing comparability of 
financial statements of different enterprises.

11. National and International Accounting Authorities.

It was during the early years of World War II, that the concept of cost as an independent entity made its 
beginning in the industrial circles of the world. Due to the prohibitive cost of defense operations, the then 
governments at war found it difficult to ascertain the price of defence purchases and thus evolved the concept of 
cost + contracts. This forced the contractors to submit the cost of the work to be undertaken by them, in order to 
be awarded the contract. 1945 brought the end of the war, and the nations ravaged by the effects of war began 
large-scale reconstruction of their economies through industrialisation. The end of colonialism meant that many 
nations gained their independence, and this process increased rapidly. The late forties and fifties can really be 
termed the golden era of industrialisation. The importance of cost accounting as being central to the formation 
of government policies provided the foundation of the rapid growth of the profession. What began as a mere 
exercise in estimating the cost later developed into a movement for efficiency and optimum utilisation of scarce 
resources. The Institute of Cost Accountants of India (erstwhile The Institute of Cost and Works Accountants 
of India) was first established in 1944 as a registered company under the Companies Act with the objects of 
promoting, regulating and developing the profession of Cost Accountancy. On 28th May, 1959, the Institute was 
established by a special act of Parliament, namely, the Cost and Works Accountants Act, 1959 as a statutory 
professional body for the regulation of the profession of cost and management accountancy. It has since been 
continuously contributing to the growth of the industrial and economic climate of the country. The Institute of 
Cost Accountants of India is the only recognized statutory professional organization and licensing body in India 
specializing exclusively in Cost and Management Accountancy.

12. Adoption, Convergence and Interpretation of International Financial Reporting Standards 
(IFRS) and Accounting Standards in India

According to international accounting standard board (IASB) conceptual framework, the objective of general 
purpose financial reporting is to provide financial information about the reporting entity that is useful to existing 
and potential investors, lenders and other creditors is making decisions about providing resources to the entity. 
Consequently, the two important characteristics of financial information that emanates from the above objective 
relates to relevance and reliability. According to IASB Framework for the Preparation and Presentation of 
Financial Statement, information is deemed to be relevant when it influences the economic decisions of users 
by helping them evaluate past, present or future events or confirming or correcting, their past evaluations.

Similarly to be reliable, information must represent faithful the transactions and other events it either purports 
to represent or could reasonably be expected to represent.
13. An Overview of Cost:

Cost is a measurement, in monetary terms, of the amount of resources used for the purpose of production of goods or rendering services. Cost in simple words, means the total of all expenses. Cost is also defined as the amount of expenditure (actual or notional) incurred on or attributable to a given thing or to ascertain the cost of a given thing. Thus it is that which is given or in sacrificed to obtain something. The cost of an article consists of actual outgoings or ascertained charges incurred in its production and sale. Cost is a generic term and it is always advisable to qualify the word cost to show exactly what it meant, e.g., prime cost, factory cost, etc. Cost is also different from value as cost is measured in terms of money whereas value in terms of usefulness or utility of an article.


Cost Audit involves an examination of cost books, cost accounts, cost statements and subsidiary and prime documents with a view to satisfying the auditor that these represent true and fair view of the cost of production. This includes the examination of the appropriateness of Cost accounting system.

Cost Audit is an innovation introduced for the first time in the world and India with a view to regulate industries on healthy and sound lines. It is for cost-effective products and services to customers, proper revenue to government’s treasury and proper returns to other stakeholders of the enterprise. India is the first country in the world introducing the legal provisions for compulsory maintenance of cost records, so that industries become cost conscious and industrial efficiency is increased for the benefit of the society as a whole. It fully conforms to the requirements of planning for ‘sustainable development’. If an enterprise is to work effectively all its assets and liabilities must be used in the most rational manner. This means that the productive areas within the control of the enterprise, its buildings, equipment, machineries etc. must be used to the maximum and this in turn presupposes the economical expenditure of circulating assets or working capital. Efficient use of productive resources for the maximum benefit to the society is an immutable law of economic development and cost accounting system, and its audit is the most significant means of ensuring the same.

15. Budget, Budgeting and Budgetary Control:

The literary meaning of the word Budget is a statement of income and expenditure of a certain period. In principle, the meaning is same in the context of business also. An individual will have his own budget, a family, a local authority, state and country etc. All will have their respective budgets. So also the business concern must have its budget so as to attain their objectives. CIMA defines a budget as, “A budget is a financial and/or quantitative statement, prepared prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective.”

Also provide types of budgets, meaning of budgetary control, concepts covered under the chapter and finally what students are going to learn.

16. Ratio Analysis:

Ratio analysis is the process of determining and interpreting numerical relationships based on financial statements. A ratio is a statistical yard stick that provides a measure of the relationship between variables or figures. This relationship can be expressed as percent (cost of goods sold as a percent of sales) or as a quotient (current assets as a certain number of times the current liabilities). As ratios are simple to calculate and easy to understand there is a tendency to employ them profusely. While such statistical calculations stimulate thinking and develop understanding there is a danger of accumulation of a mass of data that obscures rather than clarifies relationships. The financial analyst has to steer a careful course. His experience and objectives of analysis help him in determining which of the ratios are more meaningful in a given situation.
17. Management Reporting (Management Information Systems)

A management information system (MIS) produces information that supports the management functions of an organisation and facilitates the decision-making process. The MIS is thus an organised approach of collecting, processing, storing and disseminating data to carry out management functions. To transform data into information, processing is needed and it must be done while considering the context of a decision. Good information must have the characteristics of relevance, timeliness, accuracy, cost-effectiveness, reliability, usability, and exhaustiveness. The MIS can play a critical role in the implementation of a programme in terms of monitoring periodic progress. A well designed MIS facilitates the flow of information among various levels and enables setting up of a feedback mechanism for planning and management of a programme, project or a policy. The MIS must be simple and easy to comprehend by different stakeholders of the programme at national, sub-national and community levels, and it should provide reliable information. The information should be specific, accurate and verifiable; it should facilitate timely management decision in terms of frequency and flow of information (i.e. a two-way feedback system in a decentralised framework). The information generated by the system should be easy to access, process and use; thereby enabling a wider dissemination. Also, it should be amenable to computer software.

18. Decision Making Tools:

The term ‘marginal cost’ is defined as the amount at any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit. It is a variable cost of one unit of a product or a service i.e., a cost which would be avoided if that unit was not produced or provided. Marginal costing is “the ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable costs.” Several other terms in use like direct costing, contributory costing, variable costing, comparative costing, differential costing and incremental costing are used more or less synonymously with marginal costing.

It is a process whereby costs are classified into fixed and variable and with such a division so many managerial decisions are taken. The essential feature of marginal costing is division of total costs into fixed and variable, without which this could not have existed. Variable costs vary with volume of production or output, whereas fixed costs remains unchanged irrespective of changes in the volume of output. It is to be understood that unit variable cost remains same at different levels of output and total variable cost changes in direct proportion with the number of units. On the other hand, total fixed cost remains same disregard of changes in units, while there is inverse relationship between the fixed cost per unit and the number of units.

A ‘Transfer Price’ is that notional value at which goods and services are transferred between divisions in a decentralized organisation. Transfer prices are normally set for intermediate products, which are goods, and services that are supplied by the selling division to the buying division. In large organisations, each division is treated as a ‘profit center’ as a part and parcel of decentralization. Their profitability is measured by fixation of ‘transfer price’ for inter divisional transfers.

The transfer price can have impact on the division’s performance and hence lot of care is to be taken in fixation of the same. The following factors should be taken into consideration before fixing the transfer prices.

1. Transfer price should help in the accurate measurement of divisional performance.
2. It should motivate the divisional managers to maximize the profitability of their divisions.
3. Autonomy and authority of a division should be ensured.
4. Transfer Price should allow ‘Goal Congruence’ which means that the objectives of divisional managers match with those of the organisation.
19. Valuation Principles & Framework:
Valuation is a very interesting topic. Valuation becomes very important in choosing investments for a portfolio, in deciding on the appropriate price to pay or receive in a takeover and in making investment, financing and dividend choices when running a business. The premise of valuation is that we can make reasonable estimates of value for most assets, and that the same fundamental principles determine the values of all types of assets, real as well as financial. Some assets are easier to value than others, the details of valuation vary from asset to asset, and the uncertainty associated with value estimates is different for different assets, but the core principles remain the same. The objective of this lesson is to get students aware about different aspects related to valuation of shares, goodwill, trademarks and other intangibles. After the end of this lesson, you will able to:

- Understand the different methods of valuation of shares.
- Familiarize with the concept of fair value of shares.
- Understand the procedure of valuation of preference shares.
- Understand the meaning of intangible assets.
- Evaluate the identifiability of intangible assets.
- Explain the recognition of intangible assets.
- Appreciate the acquisition of intangible assets by way of government grants.
- Understand the treatment of internally generated goodwill.
- Conceptualize the recognition of an expense on intangible assets.
- Explain the amortization of intangible assets
- Explain the retirement and disposals of intangible assets

20. Valuation of Shares, Business and Intangible Assets:
A share is the smallest unit of ownership of a company. It happens to be one of the sources by which a company raises funds from the market. The value of a share does not remain static over its life-time. Rather it changes over the period due to various circumstances. Thus, knowing the value of share at a particular point of time is of great importance.

Goodwill is an intangible fixed asset of an organisation which has to be reflected in its books of accounts on certain circumstances. For this purpose, a money value is required to be attached to this intangible asset. the process of estimating the value of goodwill using certain accepted methodologies is referred to as valuation of goodwill.

21. Accounting for Share based payments (Ind AS 102)
A share-based payment is a transaction in which the entity receives goods or services either as consideration for its equity instruments or by incurring liabilities for amounts based on the price of the entity’s shares or other equity instruments of the entity.

Employee share-based payments are incentive payments to employees in form of shares. The expression employee share-based payments also include cash incentives to employees, the size of which is linked with value of shares. The payment in form of shares generally involve grant of options to employees to subscribe shares of employer’s enterprise at a concessional price, called the exercise price. The employees gain the excess of market price of share at the time of exercise over the specified exercise price. In case of employee share-based payments in form of cash incentive, the excess of market price on specified future date and a stated price is paid in cash. In either case, the value of incentive depends on increase in share value, which
is the generally accepted indicator financial success of a business. By linking incentives with value of shares, the employee share-based payment plans effectively integrate personal goals of employees with that of the enterprise.

**22. Methods of Valuation:**

When valuing a company as a going concern there are three main valuation methods used by industry practitioners: (1) DCF Analysis, (2) comparable company analysis, and (3) precedent transactions. These are the most common methods of valuation used in investment banking, Equity Research, Private Equity, Corporate Development, Merger & Acquisitions, Leveraged Buyouts and most areas of finance.

Comparable company analysis (also called “trading multiples” or “peer group analysis” or “equity comps” or “public market multiples”) is a relative valuation method in which you compare the current value of a business to other similar businesses by looking at trading multiples like P/E, EV/EBITDA or other ratios. Multiples of EBITDA are the most common valuation method.

Precedent transactions analysis is another form of relative valuation where you compare the company in question to other businesses that have recently been sold or acquired in the same industry. These transaction values include the take-over premium included in the price for which they were acquired.

These values represent the en bloc value of a business. They are useful for M&A transactions, but can easily become stale-dated and no longer reflective of the current market as time passes. They are less commonly used than Comps or market trading multiples.

Discounted Cash Flow (DCF) analysis is an intrinsic value approach where an analyst forecasts the business' unlevered cash-flow into the future and discount it back to today at the firm's Weighted Average Cost of Capital (WACC).

A DCF analysis is performed by building a finance model in Excel and requires an extensive amount of detail and analysis. It is the most detailed of the three approaches, requires the most assumptions and often produces the highest value. However, the effort required for preparing a DCF model will also often result in the most accurate valuation. A DCF model allows the analyst to forecast value based on different scenarios, and even perform a sensitivity analysis.

For larger businesses, the DCF value is commonly a sum-of-the-parts analysis, where different business units are modeled individually and added together.
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Lesson 1

Introduction to Financial Accounting

LESSON OUTLINE

- Introduction
- Single Entry System
- Double Entry System
- The Concepts of ‘Account’, ‘Debit’ and ‘Credit’ kinds of Accounts
- The Accounting Process
- Accounting Equation
- Books of Prime Entry
- Subsidiary Books
- Ledger Accounts
- Trial Balance
- LESSON ROUND UP
- SELF-TEST QUESTIONS

LEARNING OBJECTIVES

In today’s business world, accounting is considered as ‘the universal language of business’, because it is the vehicle for reporting financial information about a business entity to users, such as shareholders and managers. A proper accounting system is essential to any business, whether big or small, in order to manage its daily functions, and to run it successfully. The main obligation of any business is to maximize profits, minimize losses and at the same time maintain its position as a responsible entity within the society.

Especially all business students should have some background in accounting to understand and interpret and present the outcomes of any business.

Accounting is a very old concept – as old as money. A description of proper keeping of accounts is also found in ‘Arthashastra’ written by Kautilya. However, it has developed with the passage of time to meet the requirements and challenges of ever growing society. The modern day accounting concept based on double entry system was originated by Luco Pacioli in Italy. Though the act of accounting is very old, in recent times it has acquired special significance because of rapidly growing economy, cut-throat competition, expanding markets rapid increasing production and changes in technology.

In this lesson, we will throw light on the basic concepts of accounting, kinds of accounts, accounting principles, conventions, concepts and standard, meaning of double entry system, and the rules of debit and credit on which the entire concept of accounting is based.
INTRODUCTION

Business is an economic activity undertaken with the motive of earning profits and maximizing the wealth for owners. No business can run in isolation. Largely, the business activity is carried out by people coming together with a purpose to serve a common cause. This team is often referred to as an organization, which could be in different forms and such as sole proprietorship, partnership, corporate body, etc. The rules of any business are based on general principles of trade, social values, and statutory framework encompassing national or international boundaries. While these variables could be different for different businesses, different countries etc., the basic purpose is to add value to a product or service to satisfy customer’s demand.

The business activities require resources (which are limited and have multiple uses) primarily in terms of material, labour, machineries, factories and other services. The success of a business depends on how efficiently and effectively these resources are managed. Therefore, there is a need to ensure that the businessman tracks the use of these resources. The resources are not free, and thus one must be careful to keep an eye on cost of acquiring them as well. As the basic purpose of business is to make profit, one must keep an ongoing track of the activities undertaken in course of business. Two basic questions would have to be answered:

(a) What is the result of any business operations? This will be answered by finding out whether it has made profit or loss?
(b) What is the position of the resources acquired and used for business purposes? How are these resources financed? Where do the funds come from?

The answers to these questions are to be found continuously, and the best way to find them is to record all the business activities. Recording of business activities has to be done in a scientific manner so that they reveal the correct outcome. The science of book-keeping and accounting provides an effective solution. It is a branch of social sciences. This study material aims at giving a platform to the students to understand basic principles and concepts, which can be applied to accurately measure the performance of a business. After studying the various chapters included herein, the student should be able to apply the principles, rules, conventions and practices to different business situations like, trading, manufacturing or services.

OBJECTIVES OF ACCOUNTING

- **Providing Information to the Users for Rational Decision-making**

  The primary objective of accounting is to provide useful information for decision-making to stakeholders such as owners, management, creditors and investors. Various outcomes of business activities such as costs, prices, sales volume, value under ownership and return of investment are measured in the accounting process. All these accounting measurements are used by stakeholders (owners, investors, creditors/bankers, etc.) in course of a business operation. Hence, accounting is identified as the language of a business.

- **Systematic Recording of Transactions**

  To ensure reliability and precision for the accounting measurements, it is necessary to keep a systematic record of all financial transactions of a business enterprise which is ensured by book-keeping. These financial records are classified, summarized and reposted in the form of accounting measurements to the users of accounting information i.e., stakeholders.

- **Ascertainment of Results of Above Transactions**

  ‘Profit/Loss is a core accounting measurement done measured by preparing a Profit and Loss Account for a particular period. Various other accounting measurements, such as different types of revenue expenses and revenue incomes are considered for preparing this profit and loss account. Difference between these revenue incomes and revenue expenses is known as the result of business transactions.
identified as profit/loss. As this measure is used very frequently by stockholders for rational decision making, it has become the objective of accounting. For example, Income Tax Act requires that every business should have an accounting system that can measure taxable income of the business and also explain nature and source of every item reported in Income Tax Return.

- **Ascertain the Financial Position of Business**

Financial position is another core accounting measurement. Financial position is identified by preparing a statement of ownership meaning Assets, and Owings meaning liabilities of the business as on a certain date. This statement is popularly known as Balance Sheet. Various other accounting measurements, such as different types of assets, and different types of liabilities as existed at a particular date they are considered for preparing the balance sheet. This statement may be used by various stakeholders for financing and investment decisions.

- **To Know the Solvency Position**

Balance Sheet, and Profit and Loss Account prepared as above give useful information to stockholders regarding concerns potential to meet their obligations in the short as well as in the long run.

### Function of Accounting

The main functions of accounting are as follows:

- **Measurement**: Accounting measures past performance of a business entity and depicts its current financial position.

- **Forecasting**: Accounting helps in forecasting future performance and financial position of an enterprise using past data.

- **Decision-Making**: Accounting provides relevant information to the users of accounts to aid rational decision-making.

- **Comparison & Evaluation**: Accounting assesses performance achieved in relation to targets and discloses information regarding accounting policies and contingent liabilities which play an important role in predicting, comparing and evaluating financial results.

- **Control**: Accounting also identifies weaknesses of the operational system and provides feedbacks regarding effectiveness of measures adopted to check such weaknesses.

- **Government Regulation and Taxation**: Accounting provides necessary information to the government to exercise control on the entity as well as in collection of tax revenues.

### Book-Keeping

As defined by Carter, Book-Keeping is a science as well as art of correctly recording in books of accounts all those business transactions that result in transfer of money or money’s worth.’

Book-keeping is an activity concerned with recording and classifying financial data related to business operation in order of its occurrence.

Book-keeping is a mechanical task which involving:

- Collection of basic financial information
- Identification of events and transactions with financial character, i.e., economic transactions
- Measurement of economic transactions in terms of money
- Recording of financial effects of economic transactions in order of its occurrence
Classifying effects of economic transactions
Preparing organized statement known as Trial Balance

**Distinction between Book-Keeping and Accounting**

<table>
<thead>
<tr>
<th>Book-Keeping</th>
<th>Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Output of book-keeping is an input for accounting.</td>
<td>1. Output of accounting permit informed judgments and decisions by the user of accounting information.</td>
</tr>
<tr>
<td>2. Purpose of book-keeping is to keep systematic record of transactions and events of financial character in order of its occurrence.</td>
<td>2. Purpose of accounting is to find results of operating activity of a business and to report its financial strength.</td>
</tr>
<tr>
<td>3. Book-keeping is the foundation of accounting.</td>
<td>3. Accounting is considered as a language of business.</td>
</tr>
<tr>
<td>4. Book-keeping is carried out by the junior staff.</td>
<td>4. Accounting is done by the senior staff who have skills of analysis and interpretation.</td>
</tr>
<tr>
<td>5. Objects of book-keeping is to summarize the cumulative effect of all economic transactions of business for a given period by maintaining permanent record of each business transaction with its evidence and financial effects on accounting variable.</td>
<td>5. Object of accounting is not only book-keeping but also analyzing and interpreting reported financial information for informed decisions.</td>
</tr>
</tbody>
</table>

**Accounting Cycle**

When complete sequence of accounting procedure is done, which happens frequently, and repeated in same directions during an accounting period, it is called an Accounting Cycle.

**Steps/Phases of Accounting Cycle**

The steps or phases of accounting cycle can be developed as under:

- **Recording of Transaction**: As soon as a transaction happens it is at first recorded in subsidiary book.
- **Journal**: The transactions are recorded in the journal chronologically.
- **Ledger**: All journals are posted into ledger chronologically in a classified manner.
- **Trial Balance**: After taking all the ledger account closing balances, a Trial Balance is prepared at the end of the period for the preparations of financial statements.
- **Adjustment Entries**: All the adjustments entries are to be recorded properly and adjusted accordingly before preparing financial statements.
- **Adjusted Trial Balance**: An adjusted Trial Balance may also be prepared.
- **Closing Entries**: All the nominal accounts are to be closed by transferring them to Trading Account, and Profit and Loss Account.
- **Financial Statements**: Financial statement can now be easily prepared which will exhibit the true financial position and operating results.

**Basic Accounting Terms**

In order to understand the subject matter clearly, one must grasp the following common expressions always
used in business accounting always. The aim here is to enable the student to understand these often used concepts before we embark on accounting procedures and rules. You may note that these terms can be applied to any business activity with the same connotation.

- **Transaction**: It means an event or a business activity which involves exchange of money or money’s worth between parties. The event can be measured in terms of money and changes the financial position of a person, e.g., purchase of goods would involve receiving material and making payment or creating an obligation to pay to the supplier at a future date. Transaction could be a cash transaction or credit transaction. When the parties settle the transaction immediately by making payment in cash or by cheque, it is called a cash transaction. In credit transactions, the payment is settled at a future date as per agreement between the parties.

- **Goods/Services**: These are tangible article or commodities in which a business deals. These articles or commodities are either bought and sold or produced and sold. At times, what may be classified as goods to one business firm may not be goods to the other firm, e.g., for a machine manufacturing company, the machines are goods as they are frequently made and sold. But for the buying firm, it is not goods as the intention is to use it as a long term resource and not sell it. The services intangible in nature are rendered with or without the object of earning profits.

- **Profit**: The excess of Revenue Income over expenses is called profit. It could be calculated for each transaction or for the business as a whole.

- **Loss**: The excess of expense over income is called loss. It could be calculated for each transaction or for business as a whole.

- **Asset**: Asset is a resource owned by a business with the purpose of using it for generating future profits. Assets can be Tangible and Intangible. Tangible Assets are the Capital assets which have some physical existence. They can, therefore, be seen, touched and felt, e.g., plant and machinery, furniture and fittings, land and buildings, books, computers and vehicles. The capital assets which have no physical existence and whose value is limited by the rights and anticipated benefits that possession confers upon the owner are known as Intangible Assets. They cannot be seen or felt although they help to generate revenue in future, e.g., goodwill, patents, trade-marks, copyrights, brand equity, designs and intellectual property, etc.

Assets can also be classified as Current Assets and Non-Current Assets.

![Classification of Assets Diagram]

**Current Assets** – An asset can be classified as Current if it satisfies any of the following:

- (a) It is expected to be realized in, or is intended for sale or consumption in the company’s normal Operating Cycle,
- (b) It is held primarily for the purpose of being traded,
- (c) It is due to be realized within 12 months after the Reporting Date, or
- (d) It is Cash or Cash Equivalent unless it is restricted from being exchanged or used to settle a Liability for at least 12 months after the Reporting Date.
Non-Current Assets – All other Assets is classified as Non-Current Assets, e.g., Machinery held for long term, etc.

- Liability: It is an obligation of financial nature to be settled at a future date. It represents amount of money that the business owes to the other parties. For instance when goods are bought on credit, the firm will create an obligation to pay to the supplier the price of goods on an agreed future date, or when a loan is taken from bank, an obligation to pay the interest and principal amount is created.

Depending upon the period of holding, these obligations could be further classified into long term or non-current liabilities, and short term or current liabilities.

Current Liabilities – A liability is classified as Current when it satisfies any of the following:

(a) It is expected to be settled in the company's normal Operating Cycle;
(b) It is held primarily for the purpose of being traded;
(c) It is due to be settled within 12 months after the Reporting Date; or
(d) The company does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date (Terms of a Liability that, at the option of the counterparty, result in their settlement by the issue of Equity Instruments which do not affect its classification).

Non-Current Liabilities – All other liabilities shall be classified as Non-Current Liabilities. For example loan taken for 5 years, Debentures issued etc.

- Internal Liability: These represent proprietor's equity, i.e., all those amount which are entitled to the proprietor, like Capital, Reserves and Undistributed Profits.

- Contingent Liability: It represents a potential obligation that could be created depending on the outcome of an event. For example if a supplier of a business files a legal suit, it will not be treated as a liability because no obligation is created immediately. If the verdict of the case is given in favour of the supplier then only the obligation is created. Till that it is treated as a contingent liability. Please note that contingent liability is not recorded in books of account, but disclosed a note through in the financial statements.

- Capital: Capital is the amount invested in a business by its owners. It may be in the form of cash, goods, or any other asset which the proprietor or partners of business invest in the business activities. From business point of view, capital of owners is a liability which is to be settled only in the event of closure or transfer of the business. Hence, it is not classified as a normal liability. For corporate bodies, capital is normally represented as share capital.

- Drawings: It represents the amount of cash, goods or any other assets which the owner withdraws from business for his or her personal use, e.g., when in the life insurance premium of the proprietor or a partner of the business is paid from the business cash, it is called drawings.

Drawings will result in a reduction in the owners' capital. The concept of drawing is not applicable to the corporate bodies like limited companies.

- Net worth: It represents the excess of total assets over total liabilities of a business. Technically, this amount is made available to be distributed to the owners in the event of closure of the business after payment of all liabilities. That is why it is also termed as Owner’s Equity. A profit making business will result in the increase in the owner’s equity, whereas losses will reduce it.

- Non-Current Investments: Non-Current Investments are investments which are held beyond the current period for sale or disposal, like a Fixed Deposit for 5 years.

- Current Investments: Current investments are investments that are by their nature readily realizable and are intended to be held for not more than one year from the date on which such investment is made 11 months Commercial Paper is an example of it.
• **Debtor**: The sum total or aggregate of the amounts which the customer owes to the business for the purchase of goods on credit or services rendered or in respect of other contractual obligations, is known as Sundry Debtors or Trade Debtors, or Trade Payable, or Book-Debts or Debtors. In other words, Debtors are those persons from whom a business has to recover money on account of goods sold or a service rendered on credit. These debtors may again be classified as under:

  (a) **Good Debts**: The debts which are sure to be realized are called good debts.

  (b) **Doubtful Debts**: The debts which may or may not be realized are called doubtful debts.

  (c) **Bad Debts**: The debts which cannot be realized at all are called bad debts.

• **Fictitious Assets**: Fictitious assets are not assets at all since they are not represented by any tangible possession. They appear on the asset side simply because of a debit balance in a particular account not yet written off, e.g., provision for discount to creditors, discount on issue of shares, etc.

• **Wasting Assets**: Such assets as mines, quarries, etc., that become exhausted or reduce in value by their working are called wasting assets.

It must be remembered that while ascertaining the debtors balance at the end of the period certain adjustments may have to be made, like Bad Debts, Discount Allowed and Returns Inwards.

• **Creditor**: A creditor is a person to whom the business owes money or money’s worth. For example money payable to the supplier of goods or provider of service. Creditors are generally classified as Current Liabilities.

• **Capital Expenditure**: This represents expenditure incurred for the purpose of acquiring a fixed asset which is intended to be used over long term for earning profits there from, e.g., amount paid to buy a computer for office use is a capital expenditure. At times expenditure may be incurred for enhancing the production capacity of the machine. This will also be a capital expenditure. Capital expenditure forms a part of the Balance Sheet.

• **Revenue Expenditure**: This represents expenditure incurred to earn revenue of the current period. The benefits of revenue expenses get exhausted in the year of the incurrence. For example repairs, insurance, salary and wages to employees, travel, etc. The revenue expenditure results in the reduction in profit or surplus. It forms become part of the Income statement.

• **Balance Sheet**: It is the statement of the financial position of the business entity on a particular date. It lists all assets, liabilities and capital. It is important to note that this statement exhibits the state of affairs of the business as on a particular date only. It describes what the business owns and what it owes to outsiders (this denotes liabilities), and to the owners (this denotes capital). It is prepared after incorporating the resulting Profit/Losses or Income Statement.

• **Profit and Loss Account or Income Statement**: This account shows the revenue earned by the business and the expenses incurred by it to earn that revenue. This is prepared usually for a particular accounting period, which could be a month, quarter, half a year or a year. The net result of the Profit and Loss Account shows profit earned or loss suffered by the business entity.

• **Trade Discount**: It is the discount usually allowed by the wholesaler to the retailer computed on the list price or invoice price. For example the list price of a TV set could be Rs. 15,000. The wholesaler may allow 20% discount thereof to the retailer. This means the retailer will get it for Rs.12000 and is expected to sell it finally to a customer at the list price. Thus the trade discount enables the retailer to make profit by selling at the list price. Trade discount is not recorded in the books of accounts. The transactions are recorded at net values only. In above example, the transaction will be recorded at Rs. 12,000 only.
**Cash Discount:** It is allowed to encourage prompt payment by the debtor. It has to be recorded in the books of accounts. It is calculated after deducting the trade discount, like if list price is Rs. 15,000 on which a trade discount of 20% and cash discount of 2% apply, the first trade discount of Rs.3,000 (20% of Rs. 15,000) will be deducted and the cash discount of 2% will be calculated on Rs.12,000 (Rs.15,000 – Rs.3,000). Hence the cash discount will be Rs.240 (2% of Rs. 12,000) and net payment will be Rs. 11,760 (Rs. 12,000 - Rs. 240).

**Single Entry:** Single Entry System is an incomplete ‘double entry system’. In case of double entry system of book-keeping both the aspects of every transaction are recorded. In this system, the first entry is made to the debit of an account, and the second entry to the credit of second account. However, in case of single entry system, the business houses for their convenience and more practical approach ignore the strict rules of double entry system. The users of this system maintain only the essential records. In other words, it is a system which may not keep some books of subsidiary records, and some ledger accounts too which otherwise are kept in case of double entry system.

According to a Dictionary of Accountancy by Kohler, “A system of book-keeping in which as a rule only records of cash and of personal accounts are maintained, it is always incomplete double entry varying with the circumstances.” Thus, under the so-called single entry system both the aspects of business transactions and events are not recorded. Therefore, this may be defined, “as any system which is not exactly the Double Entry System”. Under the single entry system usually a cash book and personal accounts are maintained.

### DOUBLE ENTRY SYSTEM

It was in 1494 that Luca Pacioli, the Italian mathematician, first published his comprehensive treatise on the principles of Double Entry System. The use of principles of double entry system made it possible to record not only cash but also all sorts of mercantile transactions. It had created a profound impact on auditing too, because it enhanced the duties of an auditor to a considerable extent.

#### Features of Double Entry System

(a) Every transaction has twofold aspects, i.e., one party giving the benefit and the other receiving the benefit.

(b) Every transaction is divided into two aspects, debit and credit. One account is to be debited and the other account is to be credited.

(c) Every debit must have its corresponding and equal credit.

#### Advantages of Double Entry System

(a) Since personal and impersonal accounts are maintained under the double entry system, both the effects of the transactions are recorded.

(b) It ensures arithmetical accuracy of the books of accounts, for every debit, there is a corresponding and equal credit. This is ascertained by preparing a trial balance periodically, or at the end of the financial year.

(c) It prevents and minimizes frauds. Moreover frauds can be detected early.

(d) Errors can be checked and rectified easily.

(e) The balances of receivables and payables are determined easily, since the personal accounts are maintained.

(f) The businessman can compare the financial position of the current year with that of the past years.

(g) The businessman can justify the standing of his business in comparison with the previous year purchase, sales, and stocks, incomes and expenses with that of the current year figures.
(h) Helps in decision-making.

(i) The net operating results can be calculated by preparing the Trading and Profit and Loss A/c for the year ended and the financial position can be ascertained by the preparation of the Balance Sheet.

(j) It becomes easy for the Government to calculated the tax.

(k) It helps the Government to decide sickness of business units and extend help accordingly.

(l) The other stakeholders, like suppliers and banks take a proper decision regarding grant of credit or loans.

**Limitations of Double Entry System**

(a) The system does not disclose all the errors committed in the books accounts.

(b) The Trial Balance prepared under this system does not disclose certain types of errors.

(c) It is costly as it involves maintenance of numbers of books of accounts.

**THE CONCEPTS OF ‘ACCOUNT’, ‘DEBIT’ AND ‘CREDIT’**

**The Concept of Account**

(a) An account is defined as a summarized record of transactions related to a person or a thing, e.g., when the business deals with customers and suppliers, the customer and supplier will each be a separate account.

(b) The account is also related to things – both tangible and intangible, like, land, building, equipment, brand value and trademarks are some of the things. When a business transaction happens, one has to identify the account that will be affected by it and then apply the rules to decide its accounting treatment.

(c) Typically, an account is expressed as a statement in form of English letter ‘T’. It has two sides. The left hand side is called as the Debit side, and the right hand side is called as the Credit side. The debit is denoted as ‘Dr’ and the credit as ‘Cr’. The convention is to write the Dr and Cr labels on both sides as shown below. Please see the following example:

```
Cash Account
| Debit side | Credit side |
```

**Types of Accounts**

Let us see what each type of account signifies:
(a) **Personal Account:** As the name suggests these are accounts related to persons.

   (a) These persons could be natural persons, like Suresh’s A/c, Anil’s A/c and Rani’s A/c.

   (b) The persons could also be artificial persons like companies, bodies corporate or association of persons or partnerships. Accordingly, we could have Videocon Industries A/c, Infosys Technologies A/c, Charitable Trust A/c, Ali and Sons trading A/c and ABC Bank A/c.

   (c) There could be representative personal accounts as well. Although the individual identity of persons related to these is known, the convention is to reflect them as collective accounts. e.g. when salary is payable to employees, we know how much is payable to each of them, but collectively the account is called as Salary Payable A/c’. Similar examples are rent payable, Insurance prepaid, commission pre-received, etc. The students should be careful to have clarity on this type and the chances of error are more here.

(b) **Real Accounts:** These are accounts related to assets or properties or possessions. Depending on their physical existence or otherwise, they are further classified as follows:

   (a) Tangible Real Account – Assets that have physical existence and can be seen, and touched under this as Machinery A/c, Stock A/c, Cash A/c, Vehicle A/c, and the like.

   (b) Intangible Real Account – These represent possession of properties that have no physical existence but can be measured in terms of money and have value attached to them like Goodwill A/c, Trade mark A/c, Patents & Copy Rights A/c and Intellectual Property Rights A/c.

   (c) **Nominal Account:** These accounts are related to expenses or losses and incomes or gains e.g. Salary and Wages A/c, Rent of Rates A/c, Travelling Expenses A/c, Commission received A/c and Loss by fire A/c.

**THE ACCOUNTING PROCESS**

The two approaches for deciding an account are debited or credited.

(A) American Approach or Modern Approach

(B) British Approach or Traditional Approach

(A) **American Approach:** According to this approached the rules of debit and credit transactions are divided into the following five categories:

   (a) Transactions relating to owner, e.g., Capital – these are personal accounts.

   (b) Transactions relating to other liabilities, e.g., suppliers of goods – these are mostly personal accounts.

   (c) Transactions relating to assets, e.g., land, building, cash, bank, stock-in-trade, bills receivable – these are basically real accounts.

   (d) Transactions relating to expenses, e.g., rent, salary, commission, wages, cartage – These are nominal accounts.

   (e) Transactions relating to revenues, e.g., interest received, dividend received, sale of goods – these are nominal accounts.

B) **British Approach or Double Entry System:**

When one identifies the account that is getting affected by a transaction and type of that account, the next step is to apply the rules to decide whether the accounting treatment is to be debited or credited from that account. The Golden Rules will guide us whether the account is to be debited or credited.
These rules are shown below:

| Personal Account | Debit the receiver or who owes business Credit the giver or to the business owner |
| Real Account | Debit what comes into business Credit what goes out of business |
| Nominal Account | Debit all expenses or losses Credit all income or gains |

**ACCOUNTING EQUATION**

The whole Financial Accounting depends on Accounting Equation which is also known as Balance Sheet Equation. The basic Accounting Equation is:

\[
\text{Assets} = \text{Liabilities} + \text{Owner's equity}
\]

or \( A = L + P \)

or \( P = A - L \)    Where \( A = \text{Assets}, L = \text{Liabilities}, P = \text{Capital} \)

or \( L = A - P \)

While trying to do this correlation, please note that income or gains will increase owner's equity and expenses or losses will reduce it.

**DOUBLE ENTRY SYSTEM, BOOKS OF PRIME ENTRY, SUBSIDIARY BOOKS**

Double Entry System - we have already explained this part.

**BOOKS OF PRIME ENTRY**

A journal is often referred to the Book of Prime Entry or Book of Original Entry. In this book transactions are recorded in their chronological order. The process of recording transaction in a journal is called 'Journalization'. The entry made in this book is called 'journal entry'.

**Functions of Journal**

(a) **Analytical Function**: Each transaction is analyzed into the debit aspect as well as the credit aspect. This helps to find out how each transaction will financially affect the business.

(b) **Recording Function**: Accountancy is a business language which helps to record the transactions based on the principles. Each such recording entry is supported by a narration, which explain, the transaction in simple language. Narration means to narrate – i.e., to explain. It starts with the word – Being.

(c) **Historical Function**: It contains a chronological record of the transactions for future references.

**Advantages of Journal**

The following are the advantages of a journal:

(a) **Chronological Record**: It records transactions as and when it happens. So it is possible to get detailed day-to-day information.
Minimizing the possibility of errors: The nature of transaction and its effect on the financial position of the business is determined by recording and analyzing into both debit and credit aspects.

Narration: It means explanation of the recorded transactions.

Helps to finalize the accounts: Journal is the basis of ledger posting and the ultimate Trial Balance. The Trial Balance helps to prepare the final accounts.

The specimen of a journal book is shown below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Voucher number</th>
<th>Ledger folio</th>
<th>Debit amount (Rs.)</th>
<th>Credit amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>dd-mm-yy</td>
<td>Name of A/c from which to be debited</td>
<td></td>
<td>Reference of page number of the A/c in ledger</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name of A/c to be credited (narration describing the transaction)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Explanation of Journal**

(a) **Date Column:** This column contains the date of the transaction.

(b) **Particulars:** This column contains which account is to be debited and which account is to be credited. It is also supported by an explanation called narration.

(c) **Voucher Number:** This column contains the number written on the voucher of the respective transaction.

(d) **Ledger Folio (L.F.):** This column contains the folio (i.e. page no.) of the ledger, where the transaction is posted.

**Dr. Amount and Cr. Amount:** This column shows the financial value of each transaction. The amount is recorded in both the columns, since for every debit there is a corresponding and equal credit. All the columns are filled in at the time of entering the transaction, except for the column of ledger folio. This is filled at the time of posting of the transaction to ledger.

**Sub-division of Journals**

Journal is divided into two types -(i) General Journal and (ii) Special Journal.
(i) General Journal
(a) This is a book of chronological record of transactions.
(b) This book records those transactions which occur so infrequently that they do not warrant the setting up of special journals.

Examples of such entries: (i) opening entries (ii) closing entries (iii) rectification of errors.

The form of this general journal, is as under:

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>L.F.</th>
<th>Dr. Amount</th>
<th>Cr. Amount</th>
</tr>
</thead>
</table>

L.F. : Ledger Folio
Dr : Debit
Cr : Credit

Recording of transactions in this book is called journalizing and the record of transactions is known as journal entry.

(ii) Special Journal
It is subdivided into Cash Book, Purchase Day Book, Sales Day Book, Returns Inward Book, Returns Outward Book, Bills Receivable Book and Bills Payable Book. These books are called subsidiary books.

**Importance of Sub-division of journals**
When the number of transactions is large, it is practically not possible to record all the transactions through one journal because of the following limitations of Journal:

(a) The system of recording all transactions in a journal requires (a) writing down the name of the account involved as many times as the transaction occurs; and (b) an individual posting of each account debited and credited and hence, involves the repetitive journalizing and posting labour.

(b) Such a system cannot provide the information on a prompt basis.

(c) Such a system does not facilitate the installation of an internal check system because the journal can be handled by only one person.

(d) The journal becomes huge and voluminous.

To overcome the shortcomings of the use of the journal only as a book of original entry, it is sub-divided into special journal.

The journal is subdivided in such a way that a separate book is used for each category of transactions which are repetitive in nature and are sufficiently large in number.

**Compound Journal**
If for a single transaction, only one account is debited and one account is credited, it is known as simple journal.

If the transaction requires more than one account to be debited or more than one account to be credited, it is known as Compound Journal.
SUBSIDIARY BOOKS

Subsidiary Books refers to books meant for specific transactions of similar nature. They are also known as Special journals or day books. To overcome shortcoming of the use of the journal only as a book of original entry, the journal is subdivided into specific journals or subsidiary books.

The subdivision of journal is done as follows:

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Subsidiary Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cash and bank transactions</td>
<td>Cash Book has columns for cash, bank and cash discount</td>
</tr>
<tr>
<td>All credit purchase of goods – only those Goods that are purchased for resale are covered here.</td>
<td>Purchase Day Book or Purchase Register.</td>
</tr>
<tr>
<td>All credit sale of goods</td>
<td>Sales Day Book or Sales Register</td>
</tr>
<tr>
<td>All purchase returns – i.e., return of goods back to suppliers due to defects</td>
<td>Purchase Return Book or Return Outward Book</td>
</tr>
<tr>
<td>All sales returns – i.e., return of goods back from customers</td>
<td>Sales Return Book or Return Inward Book</td>
</tr>
<tr>
<td>All bill receivables – these are bills accepted by customers to be honoured at an agreed date.</td>
<td>Bills Receivable Book</td>
</tr>
<tr>
<td>All bills payable - these are bills accepted by the business to be honoured by paying to suppliers at an agreed date.</td>
<td>Bills Payable Book</td>
</tr>
<tr>
<td>For all other transactions not covered in any of the above categories – i.e., purchase or sale of assets, expense accruals, rectification entries, adjusting entries, opening entries and closing entries.</td>
<td>Journal Proper</td>
</tr>
</tbody>
</table>

Recording of Cash and Bank Transactions

Cash Book

A Cash Book is a special journal which is used for recording all cash receipts and cash payments. Cash Book is a book of original entry since transactions are recorded for the first time from the source documents. The Cash Book is larger in the sense that it is designed in the form of a Cash Account and records cash receipts on the debit side and cash payments on the credit side. Thus, the Cash Book is both a journal and a ledger.

Types of Cash Book

There are different types of Cash Book as follows:

- **Single Column Cash Book** - Single Column Cash book has one amount column on each side. All cash receipts are recorded on the debit side and all cash payments on the payment side; this book is nothing but a Cash Account and there is no need to open separate cash account in the ledger.
(b) **Double Column Cash Book** - The Double Column Cash Book has two amounts. Columns on each side are as under:

(a) Cash and discount columns

(b) Cash and bank columns

(c) **Triple Column Cash Book** - Triple Column Cash Book has three amount columns, one for cash, one for bank and one for discount on each side. All cash receipts, deposits into book and discounts allowed are recorded on the debit side and all cash payments, withdrawals from bank and discounts received are recorded on the credit side. In fact, a triple-column cash book serves the purpose of both Cash Account and Bank Account. Thus, there is no need to create these two accounts in the ledger.

(d) The multicolumn cash book has multiple columns on both the sides of the cash book.

(e) The petty cash book.

---

<table>
<thead>
<tr>
<th>Receipts</th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>Particulars</td>
<td>Particulars</td>
</tr>
<tr>
<td>L.F.</td>
<td>L.F.</td>
</tr>
<tr>
<td>Cash</td>
<td>Cash</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dr. Specimen of Single Column Cash Book</th>
<th>Cr.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Receipts</th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>Particulars</td>
<td>Particulars</td>
</tr>
<tr>
<td>L.F.</td>
<td>L.F.</td>
</tr>
<tr>
<td>Cash</td>
<td>Cash</td>
</tr>
<tr>
<td>Disc. Allowed</td>
<td>Disc. Received</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dr. Specimen of Double Column Cash Book</th>
<th>Cr.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Receipts</th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>Particulars</td>
<td>Particulars</td>
</tr>
<tr>
<td>L.F.</td>
<td>L.F.</td>
</tr>
<tr>
<td>Cash</td>
<td>Cash</td>
</tr>
<tr>
<td>Disc. Allowed</td>
<td>Disc. Received</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dr. Specimen of Triple Column Cash Book</th>
<th>Cr.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Receipts</th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>Particulars</td>
<td>Particulars</td>
</tr>
<tr>
<td>L.F.</td>
<td>L.F.</td>
</tr>
<tr>
<td>Cash</td>
<td>Cash</td>
</tr>
<tr>
<td>Bank</td>
<td>Discount Allowed</td>
</tr>
<tr>
<td>Discount Allowed</td>
<td>Discount Received</td>
</tr>
</tbody>
</table>

---

**Is the Cash Book a Journal or a Ledger?**

(a) Cash Book is a book of original entry since transactions are recorded for the first time from the source documents.

(b) It is a ledger in the sense that it is designed in the form of a Cash Account and records cash receipts on the debit side and cash payments on the credit side.

Thus the cash book is both a journal and a ledger.

---

**Contra Transactions**

Transactions which discounts or receive discounts in cash after the settlement of the dues are known as Contra Transactions.
(II) Cheque Transactions

When a cheque is received and no any other information at a later date about the same is given, it will be assumed that the said cheque has already been deposited into the bank on the same day when it was received. Then the entry should be as under:

Bank A/c Dr.
To Debtors/Party A/c

But if it is found that the said cheque has been deposited into the bank at a later date, the entry will be:

(i) When the cheque is received
Cash A/c Dr.
To Debtors/Party A/c

(ii) When the same was deposited into bank at a later date
Bank A/c Dr.
To Cash A/c

(iii) When the said cheque is dishonoured by the bank
Debtors/Party A/c Dr.
To Bank A/c

Purchase Day Book

The purchase day book records the transactions related to credit purchase of goods only. It follows that any cash purchase or purchase of things other than goods is not recorded in the purchase day book. Periodically, the totals of purchase day book are posted to purchase account in the ledger. A specimen of purchase day book is given below:

<table>
<thead>
<tr>
<th>In the Books of .........</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Day Book</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Name of the Suppliers and details of Goods purchased</th>
<th>Invoice reference</th>
<th>L. F.</th>
<th>Amount (‘)</th>
<th>Remarks</th>
</tr>
</thead>
</table>

The format for Purchase Return is exactly the same; hence separate illustration is not given.

Sales Day Book

The sales day book records transaction of credit sale of goods to customers. Sale of other things, even on credit, will not be entered in the sales day book, but is entered in Journal Proper. If goods are sold for cash, it is entered in the cash book. Total of sales day book is periodically posted to the sales account in the ledger. A specimen of a sales day book is given below.

<table>
<thead>
<tr>
<th>In the books of .........</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Day Book</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Invoice reference</th>
<th>L. F.</th>
<th>Amount</th>
<th>Remarks</th>
</tr>
</thead>
</table>
The format of sales return book is exactly the same; hence a separate illustration is not given.

OTHER SUBSIDIARY BOOKS – RETURNS INWARD, RETURN OUTWARD, BILLS RECEIVABLE, BILLS PAYABLE

I) **Return Inward Book** - The transactions relating to goods which are returned by the customers for various reasons, such those which are as not according to sample, or not up to the mark contain in this book. It is also known as Sales Return Book.

Generally when a customer returns goods to suppliers he issues a Debit Note for the value of the goods returned by him. Similarly the supplier who receives those goods issues a Credit Note.

<table>
<thead>
<tr>
<th>Returns Inward Day Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

II) **Return Outward Book** - This book contains transactions relating to goods that are returned by us to our creditors, e.g., goods broken in transit, or not matching with the sample, etc.

It's also known as Purchase Return Book.

<table>
<thead>
<tr>
<th>Return Outward Day Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

III) **Bills Receivable Book** - It is a book where all bills received are recorded and therefrom posted directly to the credit of the respective customer’s account. The total amounts of the bills so received during the period (either at the end of the week or month) is to be posted in one sum to the debit of Bills Receivable A/c.

<table>
<thead>
<tr>
<th>Bills Receivable Day Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Bills</td>
</tr>
</tbody>
</table>

IV) **Bills Payable Book** - Here all the particulars relating to bills accepted are recorded and therefrom posted directly to the debit of the respective creditor’s account. The total amounts of the bills so accepted during the period (either at the end of the week or month) is posted in one sum to the credit of Bills Payable Account.

<table>
<thead>
<tr>
<th>Bills Payable Day Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Bills</td>
</tr>
</tbody>
</table>

**Journal Proper**

Credit transactions that cannot be entered in any other subsidiary book are entered in journal proper.

It will cover purchase or sale of assets, expense accruals, rectification entries, adjusting entries, opening entries and closing entries. The format of journal proper is exactly the same as the Journal.
LEDGER ACCOUNTS

The book which contains accounts is known as the ledger. Since finding information pertaining to the financial position of a business emerges only from the accounts, the ledger is also called the Principal Book. As a result, all the necessary information relating to any account is available from the ledger. This is the most important book of the business and hence is rightly called the “King of All Books”. Also Known as Book of Final Entry.

The specimen of a typical ledger account is given below:

<table>
<thead>
<tr>
<th>Dr</th>
<th>Ledger-Account</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Particulars</td>
<td>J. F.</td>
</tr>
</tbody>
</table>

**Ledger Posting**

As and when the transaction takes place, it is recorded in the journal in the form of journal entry. This entry is posted again in the respective ledger accounts under double entry principle from the journal. This is called ledger posting.

**The rules for writing up accounts of various types are as follows:**

**Assets:** Increases on the left hand side or the debit side and decreases on the credit side or the right hand side.

**Liabilities:** Increases on the credit side and decreases on the debit side.

**Capitals:** The same as liabilities.

**Expenses:** Increases on the debit side and decreases on the credit side.

**Incomes or gain:** Increases on the credit side and decrease on the debit side.

To summarize:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Assets</th>
<th>Cr.</th>
<th>Dr.</th>
<th>Expenses or Loses</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td></td>
<td>Decrease</td>
<td>Increase</td>
<td></td>
<td>Decrease</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Liabilities &amp; Capital</th>
<th>Cr.</th>
<th>Dr.</th>
<th>Income or Gains</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease</td>
<td></td>
<td>Increase</td>
<td>Decrease</td>
<td></td>
<td>Increase</td>
</tr>
</tbody>
</table>

The student should clearly understand the nature of debit and credit.

**A debit denotes:**

(I) the case of a person who has received some benefit against which he has already rendered some service or will render a service in future. When a person becomes liable to do something in favour of the firm, the fact is recorded by debiting from that person’s account: (relating to Personal Account);

(II) in the case of goods or properties, where the value and stock of such goods or properties has increased, (relating to Real Accounts);

(III) in the case of other accounts where losses or expenses that the firm has incurred, (relating to Nominal Account)
A credit denotes:

(I) in case of a person, where some benefit has been received from him, entitling him to claim from the firm a return benefit in the form of cash or goods or service then a person becomes entitled to money or money's worth for any reason. The fact is recorded by crediting him (relating to Personal Account);

(II) in the case of goods or properties, where the stock and value of such goods or properties has decreased, (relating to Real Accounts);

(III) in the case of other accounts like interest or dividend or commission received, or discount received, that the firm has made a gain, (relating to Nominal Account).

**Posting to Ledger Accounts from Subsidiary Books**

In the above section, we explained how posting is done to ledger accounts directly on the basis of journal entries.

In practice, however, we know that use of subsidiary books is in vogue. Let us see how the posting to ledger accounts is done based on these records.

For each of the subsidiary books, there is a ledger account, e.g., for purchase book, there is Purchase Account, for sales book there's Sales A/c, for cash book there is Cash A/c as well as Bank A/c and so on.

**Typical Ledger Account Balances**

We have seen how to balance various ledger accounts, some accounts show debit balance, while the others show credit balance. Is there any relationship between the type of account (whether it is the account of asset, liability, capital, owner's equity, income or gain, expenses or losses) and the kind of balance (debit or credit).

The answer is generally ‘Yes’. You may test to find the following are typical relationships.

<table>
<thead>
<tr>
<th>Type of Account</th>
<th>Type of balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>All asset accounts</td>
<td>Debit balance</td>
</tr>
<tr>
<td>All liability accounts</td>
<td>Credit balance</td>
</tr>
<tr>
<td>Capital &amp; Owner's equity account</td>
<td>Credit balance</td>
</tr>
<tr>
<td>Expenses or loss accounts</td>
<td>Debit balance</td>
</tr>
<tr>
<td>Income or gain accounts</td>
<td>Credit balance</td>
</tr>
</tbody>
</table>

Let us test these possibilities for confirmation. How does one go about testing this? Consider ‘Cash A/c’. Whenever business receives cash we debit it, and whenever it pays we credit it. Is it possible to see a situation where credits to cash are more than debits? In other words could we have negative cash in hand? No. Cash account will therefore always show a debit balance. So is true for all real asset accounts.

After solving problems, if the contrary is observed, there is every chance that an error has been made while passing the accounting entries.

**Closing Balance and Opening Balance**

The debit or credit balance of an account that we get at the end of the accounting period is known as closing balance of that account.

The “balance of the nominal accounts” is closed by transferring to trading account, and the profit and loss account which shows the net operating results – net profit or net loss.
The “balance of the personal accounts and real accounts” representing assets, liabilities, owner’s equity are reflected in the Balance Sheet, which shows the financial position of a business on a particular date. These balances are transported as opening balance in the succeeding accounting period.

Some terms used:

- Casting — totaling
- Balancing — to find the difference between debit side total and credit side total of an account.

- C/d - Carried down
- B/d - Brought down
- C/o - Carried over
- B/o - Brought over
- C/f - Carried forward
- B/f - Brought forward

### Subdivisions of Ledger

Practically, the Ledger may be divided into two groups -

(a) Personal Ledger & (b) Impersonal Ledger.

They are again subdivided as:

- **Personal Ledger:** The ledger where the details of all transactions about persons who are related to the accounting unit are recorded is called Personal Ledger.

- **Impersonal Ledger:** The ledger where details of all transactions about assets, income & expenses, etc., are recorded is called Impersonal Ledger.

Again, Personal Ledger may be divided into two groups:

Viz. (a) Debtors’ Ledger, & (b) Creditors’ Ledger.

1) **Debtors’ Ledger:** The ledger where the details of transactions about the persons to whom goods are sold, cash is received, etc., are recorded is called Debtors’ Ledger.

2) **Creditors’ Ledger:** The ledger where the details of transactions about the persons from whom use purchase goods on credit, pay to them, etc., are recorded, is called Creditors’ Ledger.

Impersonal Ledger may, again be divided into two group, viz, (a) Cash Book; and (b) General Ledger.

1) **Cash Book:** The Book wherein all cash & bank transactions are recorded is called Cash Book.

2) **General Ledger:** The ledger where all transactions relating to real accounts, nominal accounts, details of Debtors’ Ledger and Creditors’ Ledger are recorded is called General Ledger.

General Ledger may again be divided into two groups, viz, Nominal Ledger & Private Ledger.
I) **Nominal Ledger**: The ledger where all transactions relating to income and expenses are recorded is called Nominal Ledger.

II) **Private Ledger**: The Ledger where all transactions relating to assets and liabilities are recorded is called Private Ledger.

### Advantages of subdivision of Ledger:

The advantages of subdivision of ledger are:

I) **Easy to divide work**: As a result of subdivision, records can be maintained efficiently by the concerned employee.

II) **Easy to handle**: As a result of subdivision, the size and volume of ledger is reduced.

III) **Easy to collect information**: From the different classes of ledger any particular type of transaction can easily be found out.

IV) **Minimizations of mistakes**: As a result of subdivision chances of mistakes are minimized.

V) **Easy to compute**: As a result of subdivision, the accounting work may be computed quickly which is very helpful to the management.

VI) **Fixation of responsibility**: Due to subdivision, allotment of different types of work to different employees is done for which concerned employee will be responsible.

### Trial Balance

Trial balance may be defined as a statement or a list of all ledger account balances taken from various ledger books on a particular date to check the arithmetical accuracy. According to the Dictionary for Accountants by Eric. L. Kohler, Trial Balance is defined as “a list or abstract of the balances or of total debits and total credits of the accounts in a ledger, the purpose being to determine the equality of posted debits and credits and to establish a basic summary for financial statements”. According to Rolland, “The final list of balances, totaled and combined, is called Trial Balance”.

As this is merely a listing of balances, it will always be on a particular date. Further, it must be understood that Trial Balance does not form part of Books of Account, but it is a report prepared by extracting balances of accounts maintained in the books of accounts.

When this list with tallied debit and credit balances is drawn up, the arithmetical accuracy of basic entries, ledger posting and balancing is ensured. However, it does not guarantee that the entries are correct in all respect. This will be explained later in this chapter.

Although it is supposed to be prepared at the end of accounting period, computerized accounting packages are capable of providing instant Trial Balance reports even on a daily basis, as the transactions are recorded almost online.

It can be seen that the respective total of debit and credit balances is exactly matching. This is the result of double entry book-keeping wherein every debit has equal corresponding credit.

### Feature's of a Trial Balance

(I) It is a list of debit and credit balances which are extracted from various ledger accounts.

(II) It is a statement of debit and credit balances.

(III) The purpose is to establish arithmetical accuracy of the transactions recorded in the Books of Accounts.

(IV) It does not prove arithmetical accuracy which can be determined by audit.
It is not an account. It is only a statement of account.

It is not a part of the final statements.

It is usually prepared at the end of the accounting year but it can also be prepared anytime as and when required like weekly, monthly, quarterly or half-yearly.

It is a link between the Books of Accounts, Profit and Loss Account and Balance sheet.

**Preparation of Trial Balance**

(I) It may be prepared on a loose sheet of paper.

(II) The ledger accounts are balanced at first. They will have either “debit-balance” or “credit balance” or “nil-balance”.

(III) The accounts containing debit-balance are written on the debit column, and those with credit-balance are written on the credit column.

The sum total of both the balances must be equal for “Every debit has its corresponding and equal credit”.

**Purpose of a Trial Balance**

It serves the following purposes:

(I) To check the arithmetical accuracy of the recorded transactions.

(II) To ascertain the balance of any ledger account.

(III) To serve as an evidence of the fact that the double entry has been completed in respect of every transaction.

(IV) To facilitate the preparation of final accounts promptly.

**Is Trial Balance Indispensable?**

It is a mere statement prepared by the accountants for his their convenience, and if it agrees, it is assumed that at least arithmetical accuracy has been done, although there may be a lot of errors.

Trial Balance is not a process of accounts, but its preparation helps us to finalize the accounts. Since it is prepared on a particular date, as at  / as on  is stated.

**Forms of a Trial Balance**

A trial balance may be prepared in two forms, they are –

(I) Journal Form

(II) Ledger Form

The trial balance must tally irrespective of the form of a trial balance.

(a) **Journal Form**: This form of a trial balance will have a format of Journal Folio. It will have columns for serial number, name of the account, ledger folio, debit amount and credit amount in the journal form.

   The ledger folio will show the page number on which such account appears in the ledger. Specimen of journal form of trial balance:
**Trial Balance as on ............**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Account</th>
<th>L.F.</th>
<th>Debit Balance (Rs.)</th>
<th>Credit Balance (Rs.)</th>
</tr>
</thead>
</table>

**(b) Ledger Form:** This form of a trial balance has two sides, i.e., debit side and credit side. In fact, the ledger form of a trial balance is prepared in the form of an account. Each side of the trial balance will have particular like name of the account column, folio column and amount column.

**Specimen of ledger form of trial balance**

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Trial Balance as on ......</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Name of the Account</td>
<td>L.F.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Method of Preparation**

(a) **Total Method or Gross Trial Balance.**

(b) **Balance Method or Net Trial Balance.**

(c) **Compound Method.**

These are explained as hereunder:

(a) **Total Method or Gross Trial Balance** : Under this method, two sides of the accounts are totaled. The total of the debit side is called the “debit total”, and the total of the credit side is called the “credit total”. Debit totals are entered on the debit side of the trial balance while the credit total is entered on the credit side of the trial balance.

If a particular account has total in one side, it will be entered either in the debit column or the credit column as the case may be.

**Advantages:**

(a) It facilitates arithmetical accuracy of the accounts.

(b) Extraction of ledger balances is not required at the time of preparation of trial balance.

**Disadvantages:** Preparation of final accounts is not possible.

(b) **Balance Method or Net Trial Balance** : Under this method, all the ledger accounts are balanced. The balances may be either “debit-balance” or “credit balance”.

**Advantages:**

(a) It helps in the easy preparation of final accounts.

(b) It saves time and labour in preparing a trial balance.

**Disadvantages:** Errors may remain undisclosed irrespective of the agreement of trial balance.

(c) **Compound Method** : Under this method, totals of both the sides of the accounts are written in the separate columns. Along with this, the balances are also written in the separate columns. Debit balances are written in the debit column and credit balances are written in the credit column of the trial balance.

**Advantages:** It offers the advantage of both the methods.
Disadvantages: It is a lengthy process and more time is consumed in the preparation of a trial balance.

### Summary of Rules

<table>
<thead>
<tr>
<th>Debit Balance — All Assets, Drawings, Debtors, Expenses and Losses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Balance — All Liabilities, Capital, Creditors, Gains and Incomes.</td>
</tr>
</tbody>
</table>

### Trial Balance – Utility and Interpretation

The utility of trial balance could be found in the following:

- (a) It forms the basis for the preparation of financial statements, i.e., Profit and Loss Account and Balance Sheet.
- (b) A tallied trial balance ensures the arithmetical accuracy of the entries made. If the trial balance does not tally, the errors can be found out, rectified and then financial statements can be prepared.
- (c) It acts as a quick reference. One can easily find out the balance in any ledger account without actually referring to the ledger.
- (d) If the listing of ledger accounts is systematically done in the trial balance, one can do quick time analysis. Hence, listing is usually done in the sequence of Asset accounts, Liability accounts, Capital accounts, Owner’s equity accounts, Income or gain accounts and Expenses or Losses accounts in that order.

One can draw some quick inferences from trial balance by interpreting it. If one plots monthly trial balances side by side, one can analyze the movement of balances in various accounts, e.g., one can see how expenses are increasing or decreasing or showing a trend of movements. By comparing the owner’s equity balances as on two dates, one can interpret the business result, e.g., if the equity has gone up, one can interpret that business has earned net profit and vice versa.

### LESSON ROUND-UP

- Accounting is the art of recording, classifying and summarizing transactions and events which are of a financial character in terms of money, and interpreting the results thereof.
- Three main branches of accounting are financial accounting, cost accounting and management accounting.
- Accounting functions are: keeping systematic records; protecting and controlling business properties; ascertaining the operational profit/loss; ascertaining the financial position of the business; and facilitating rational decision-making.
- Accounting is the language of business and is used to communicate financial and other information to different interested parties, like owners, manager, creditors, investors, researchers and government.
- Accounting information should be relevant, reliable, comparable, understandable, timely, neutral, verifiable and complete.
- Accounting can be based on cash or accrual system. In cash system, accounting entries are passed only when cash is received or paid, while in accrual system transactions are recorded on the basis of amounts having become due for payment or receipt.
- Book-keeping is different from accounting. Book-keeping is concerned with the permanent recording or maintaining of all transactions in a systematic manner to show their financial effects on the business. Accounting is concerned with the summarizing of the recorded transactions.
Accounting principles are guidelines to establish standards for sound accounting practices and procedures in reporting the financial status of a business. These principles can be accounting concepts and accounting conventions.

Accounting concepts are defined as basic assumptions on the basis of which financial statements of a business entity are prepared. While ‘convention’ denotes custom or tradition or practice based on general agreement between the accounting bodies which guide the accountant while preparing the financial statements.

Some of the important accounting concepts are: business entity concept, money measurement concept, cost concept, going concern concept, dual aspect concept, realization concept, accrual concept, accounting period concept and revenue match concept.

Accounting conventions are consistency, disclosure, conservatism and materiality.

Accounting Standards (ASs) are written policy documents issued by expert accounting body or by government or any other regulatory body.

Two classes of accounts are personal accounts and impersonal accounts. Impersonal accounts can be further classified into real and nominal accounts.

Accounting Equation represents that sum of resources (assets) is equal to the obligations (capital and liabilities) of the business.

Accounting cycle includes identifying, recording, classifying and summarizing of the transactions.

Every transaction is recorded in the journal before being posted into the ledger. It is the book of account in which transactions are recorded in a chronological order.

Recording in the journal is done following the rules of debit and credit.

Posting is the process of recording transactions in the ledger based on the entries in the journal.

The main function of a ledger is to classify or sort out all the items appearing in the journal or other subsidiary books under their appropriate accounts so that at the end of the accounting period summary of each account is easily available.

Balancing of ledger accounts involves equalization of both sides of the account by putting the difference on the side where the amount is short.


Petty Cash Book may be maintained under Imprést System of petty cash.

General journal or journal proper is maintained for recording those transactions for which there are no other appointment subsidiary book.

Trial balance is prepared after posting the entries in ledger to verify the arithmetical accuracy of entries made in the ledger.

**SELF TEST QUESTIONS**

1. Define accounting and state its characteristics.
2. Discuss the system of accounting.
3. What are the functions of accounting?
5. Explain important accounting conventions.

6. What are accounting standards?

7. Explain the basic rules of debit and credit in accounting.

8. Define the term ‘account’ and name the types of accounts? Also explain with examples.

9. What do you mean by contra-entries in a columnar cash book?

10. What is meant by columnar cash book?

11. Point out the accounts which will be debited and credited for each one of the following transactions:

   – Cash received from X and discount allowed to him.
   – Cash paid to Y and discount received from him.
   – Credit Sales to Z.
   – Cash Sales to A.
   – Purchases from B on credit.
   – Salary paid to clerk by means of cheque.
   – Payment of cash to landlord for rent.
   – Depreciation on furniture.
   – Interest due but not yet paid.
   – Interest provided on capital.

12. Give Accounting Equation for the following transactions of Jitesh:

   – Started business with cash Rs. 36,000
   – Paid rent in advance Rs. 800– Purchased goods for cash Rs.10,000 and on credit Rs. 4,000
   – Sold goods for cash Rs. 8,000
   – Rent paid Rs. 2000 and rent outstanding Rs. 400
   – Bought cycle for personal use Rs. 16,000
   – Purchased equipments for cash Rs. 10,000
   – Paid to creditors Rs. 1,200
   – Some business expenses paid Rs. 1,800
   – Depreciation on equipment Rs. 2,000
The financial statements are the end products of accounting process. They are prepared following the consistent accounting concepts, principles, procedures and also the legal environment in which the business organizations operate. These statements are the outcome of the summarizing process of accounting and therefore, are the sources of information on the basis of which conclusions are drawn about the profitability and the financial position of a company. Hence, they need to be arranged in a proper form with suitable contents so that the shareholders and other users of financial statements can easily understand and use them in their economic decisions in a meaningful way.

The objective of this lesson is to make the students understand the statutory provisions regarding preparation of final accounts of companies. After going through this lesson, one should be able to familiarize on a self with and understand the requirements that go into the preparation of statement of Profit and Loss, and Balance Sheet, and how a true and fair view of financial statements can be achieved.
INTRODUCTION

There is no legal obligation for sole proprietorship and a partnership firm to prepare final accounts, but otherwise companies have statutory obligations to keep proper books of account and to prepare its final accounts every year in the manner as prescribed in the Companies Act. Chapter IX, Sections 128 to 138 of the Companies Act, 2013 deals with the legal provisions relating to the Accounts of Companies. These sections including Schedule II and III were brought into force from 1st April 2014. The relevant rules pertaining to these provisions have also been notified. All these relevant provisions/schedules and rules will be applicable for the financial years commencing on or after 1st April 2014. It is clarified that in respect of financial years that commenced earlier than 1st April 2014, shall be governed by the relevant provisions/schedules and rules of the Companies Act, 1956.

PREPARATION AND PRESENTATION OF FINANCIAL STATEMENTS

Section 129 of the Companies Act, 2013 governs the preparation and presentation of financial statements of a company.

The financial statements shall give a true and fair view of the state of affairs of a company or companies, comply with the accounting standards notified under Section 133 and shall be in the form or forms as may be provided for different class or classes of companies in Schedule III.

- The items contained in such financial statements shall be in accordance with the accounting standards.
- Nothing contained in this sub-section shall apply to any insurance or banking company or any company engaged in the generation or supply of electricity, or to any other class of company for which a form of financial statement has been specified in or under the Act governing such class of company.
- The financial statements shall not be treated as not disclosing a true and fair view of the state of affairs of the company, merely by reason of the fact that they do not disclose –
  
  (a) in the case of an insurance company, any matters which are not required to be disclosed by the Insurance Act, 1938, or the Insurance Regulatory and Development Authority Act, 1999;
  
  (b) in the case of a banking company, any matters which are not required to be disclosed by the Banking Regulation Act, 1949;
  
  (c) in the case of a company engaged in the generation or supply of electricity, any matters which are not required to be disclosed by the Electricity Act, 2003;
  
  (d) in the case of a company governed by any other law for the time being in force, any matters which are not required to be disclosed by that law.

According to the rules for the purposes of Sub-section (1) of Section 129, the class of companies as may be notified by the Central Government from time to time, shall mandatorily file their financial statements in Extensible Business Reporting Language (XBRL) format and the Central Government may specify the manner of such filing under such notification for such class of companies. The term ‘Extensible Business Reporting Language’ means a standardized language for communication in electronic form to express, report or file financial information by companies under this rule.

At every annual general meeting of a company, the Board of Directors of the company shall lay before all members financial statements for the financial year.

Where a company has one or more subsidiaries, it shall, in addition to financial statements provided under Sub-section (2), prepares a consolidated financial statement of the company and of all the subsidiaries in the same form and manner as that of its own which shall also be laid before the annual general meeting of the company along with the laying of its financial statement under Sub-section (2).

- The company shall also attach along with its financial statement, a separate statement containing the
salient features of the financial statement of its subsidiary or subsidiaries. According to the rules the statement shall contain the salient features of the financial statement of a company's subsidiary or subsidiaries, associate company and joint venture.

- Further as per the rules the consolidation of financial statements of the company shall be made in accordance with the Accounting Standards, subject however, to the requirement that if under such Accounting Standards (AS), consolidation is not required for the reason that the company has its immediate parent outside India, then such companies will also be required to prepare Consolidated Financial Statements in the manner and format as specified under Schedule III to the Act.

The provisions of this Act applicable to the preparation, adoption and audit of the financial statements of a holding company shall, *mutatis mutandis*, apply to the consolidated financial statements.

Without prejudice to Sub-section (1), where the financial statements of a company do not comply with the accounting standards referred to in Sub-section (1), the company shall disclose in its financial statements, the deviation from the accounting standards, the reasons for such deviation and the financial effects, if any, arising out of such deviation.

The Central Government may, on its own or on an application by a class or classes of companies, by notification, exempt any class or classes of companies from complying with any of the requirements of this section or the rules made thereunder, if it is considered necessary to grant such exemption in the public interest and any such exemption may be granted either unconditionally or subject to such conditions as may be specified in the notification.

If a company contravenes the provisions of this section, the managing director, the whole-time director in charge of finance, the Chief Financial Officer or any other person shall be give the charge by the Board with the duty to complying with the requirements of this section and in the absence of any of the officers mentioned above, all the directors shall be punishable with imprisonment for a term which may extend to one year or with fine which shall not be less than fifty thousand rupees but which may extend to rupees five lakh or with both.

*Explanation* – For the purposes of this section, except where the context otherwise requires, any reference to the financial statement shall include any notes annexed to or forming part of such financial statement, giving information required to be given and allowed to be given in the form of such notes under this Act.

**SCHEDULE III OF THE COMPANIES ACT, 2013**

According to Section 129 of the Companies Act, 2013, all the companies registered under this Act will have to present its financial statements in Schedule III of the Act. The Schedule III of the Companies Act, 2013 has been formulated to keep pace with the changes in the economic philosophy leading to privatization and globalization and consequent desired changes/reforms in the corporate financial reporting practices. It deals with the Form of Balance Sheet, Statement of Profit and Loss, and disclosures to be made therein, and it applies uniformly to all the companies registered under the Companies Act, 2013, for the preparation of financial statements of an accounting year. It has several new features like:

- A vertical format for presentation of Balance Sheet with classification of Balance Sheet items into current and non-current categories.
- A vertical format of Statement of Profit and Loss with classification of expenses based on nature.
- Elimination of the concept of “Schedules” and such information is now to be furnished in terms of “Notes to Accounts”.
- It does not contain any specific disclosure for items included in Schedule VI under the head, “Miscellaneous Expenditure”. As per AS-16 borrowing cost and discount or premium relating to borrowing could be amortized over the loan period. Further, share issue expenses, discount on shares, discount/ premium
on borrowing, etc. are excluded from AS-26. These items be amortized over the period of benefit, i.e., normally 3-5 years. The draft guidance note issued by ICAI suggests that unamortized portion of such expenses be shown under the head “Other Current/Non-current Assets” depending on whether the amount will be amortized in the next 12 months or thereafter.

- Debit Balance of Statement of Profit & Loss A/c will be disclosed under the head, Reserves & Surplus as the negative figure.
- No change in the format of cash flow statement as per revised schedule and therefore its preparation continues to be as per AS-3 on cash flow statement.
- It gives prominence to Accounting Standards (AS), i.e., in case of any conflict between the AS and the Schedule, AS shall prevail.

**GENERAL INSTRUCTIONS FOR THE PREPARATION OF BALANCE SHEET AND PROFIT AND LOSS ACCOUNT**

The Schedule III sets out minimum requirements for disclosure on the face of the Balance Sheet, and the Statement of Profit and Loss (hereinafter referred to as “Financial Statements”) and Notes.

Line items, sub-line items and sub-totals shall be presented as an addition or substitution on the face of the Financial Statements when such presentation is relevant to an understanding of the company’s financial position or performance or to cater to industry/sector-specific disclosure requirements or when required for compliance with the amendments to the Companies Act or under the Accounting Standards.

This means new line items or sub-items can be added or substituted on the face of the Financial Statements when such presentation is:

- Relevant to an understanding of the company’s financial position or performance or to cater to industry/sector-specific disclosure requirements.
- To cater to industry/sector-specific disclosure requirements or when required for compliance with the amendments to the Companies Act.
- Under the Accounting Standards.

Where compliance with the requirements of the Act including Accounting Standards as applicable to the companies require any change in treatment or disclosure including addition, amendment, substitution or deletion in the head or sub-head or any changes, inter se, in the financial statements or statements forming part thereof, the same shall be made and the requirements of this Schedule shall stand modified accordingly.

The disclosure requirements specified in this Schedule are in addition to and not in substitution of the disclosure requirements specified in the Accounting Standards prescribed under the Companies Act, 2013. Additional disclosures specified in the Accounting Standards shall be made in the notes to accounts or by way of additional statement unless required to be disclosed on the face of the Financial Statements. Similarly, all other disclosures as required by the Companies Act shall be made in the notes to accounts in addition to the requirements set out in this Schedule.

Notes to accounts shall contain information in addition to that presented in the Financial Statements and shall provide where required

- Narrative descriptions or disaggregation of items recognized in those statements; and
- Information about items that do not qualify for recognition in those statements.

Each item on the face of the Balance Sheet and Statement of Profit and Loss shall be cross-referenced to any related information in the notes to accounts. In preparing the Financial Statements including the notes to accounts, a balance shall be maintained between providing excessive detail that may not assist users of financial statements and not providing important information as a result of too much aggregation.
Depending upon the turnover of the company, the figures appearing in the Financial Statements may be rounded off as given below:

<table>
<thead>
<tr>
<th>Turnover</th>
<th>Rounding off</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) less than one hundred crore rupees</td>
<td>To the nearest hundreds, thousands, lakhs or millions, or decimals thereof.</td>
</tr>
<tr>
<td>(b) one hundred crore rupees or more</td>
<td>To the nearest lakhs, millions or crores, or decimals thereof.</td>
</tr>
</tbody>
</table>

Once a unit of measurement is used, it shall be used uniformly in the Financial Statements.

Except in the case of the first Financial Statements laid before the Company (after its incorporation) the corresponding amounts (comparatives) for the immediately preceding reporting period for all items shown in the Financial Statements including notes shall also be given.

For the purpose of this Schedule, the terms used herein shall be as per the applicable Accounting Standards.

**PRESENTATION OF BALANCE SHEET**

A Balance Sheet is a statement of the financial position of an enterprise as at a given date, which exhibits its assets, liabilities, capital, reserves and other account balances at their respective book values.
## PART-I – FORM OF BALANCE SHEET

Name of the Company: .............................................................

Balance Sheet as at: .............................................................

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note</th>
<th>Figure as at the end of Current Reporting Period</th>
<th>Figures as at the end of the Previous Reporting Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Rs.)</td>
<td>(Rs.)</td>
</tr>
<tr>
<td>(1) EQUITY AND LIABILITIES Shareholders’ Funds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Share Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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#### (b) Reserves & Surplus

- **(c) Money Received against Share Warrants**

(2) Share Application money pending allotment

(3) Non-Current Liabilities

- **(a) Long-Term Borrowings**

- **(b) DTI (Net)**

- **(c) Other Long-Term Liabilities**

- **(d) Long-Term Provisions**

(4) Current Liabilities

- **(a) Short-Term Borrowings**

- **(b) Trade Payables**

- **(c) Other Current Liabilities**

- **(d) Short-Term Provisions**

**Total**

### II. ASSETS

(1) Non-Current Assets

- **(a) Fixed Assets**

  - **(i) Tangible Assets**

  - **(ii) Intangible Assets**

  - **(iii) Capital WIP**

  - **(iv) Intangible Assets under Development**

- **(b) Non-Current Investments**

  - **(c) Deferred Tax Assets (DTA) (Net)**

- **(d) Long-Term Loans & Advances**

- **(e) Other Non-Current Assets**

(2) Current Assets

- **(a) Current Investments**

- **(b) Inventories**

- **(c) Trade Receivables**

- **(d) Cash & Cash Equivalents**
(e) Short-Term Loans & Advances
(f) Other Current Assets

Total

DISCLOSURE REQUIREMENT: SCHEDULES FORMING PART OF FINANCIAL STATEMENTS/ANNUAL REPORT

(A) FOR “EQUITY AND LIABILITIES” ITEMS

(1) SHAREHOLDERS’ FUNDS

(a) SHARE CAPITAL

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points to be considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>• Sch III deals only with presentation and disclosure requirements.</td>
</tr>
<tr>
<td></td>
<td>• Accounting classification into Debt and Equity components is governed by the applicable Accounting Standard.</td>
</tr>
<tr>
<td></td>
<td>• Preference Shares will have to be classified as “Share Capital” and they also include such Preference Shares of which redemption is overdue.</td>
</tr>
</tbody>
</table>

For each Class of Share Capital (different classes of Preference Shares to be treated separately):

(a) Authorized Capital

It is the maximum number and face/par value, of each class of shares that a corporate entity may issue in accordance with its instrument of incorporation.

(b) Number of Shares Issued, Subscribed and Fully Paid, and Subscribed but not Fully Paid

• Subscribed Share Capital” is “that portion of the Issued Share Capital which has actually been subscribed by the public and subsequently allotted to the shareholders by the entity. This also includes any Bonus shares issued to the Shareholders.

• “Paid-up Share Capital” is “that part of the Subscribed Share Capital for which consideration is cash or otherwise has been received. This also includes Bonus Shares allotted and Shares issued otherwise than for cash against purchase consideration, by the corporate entity.”

• If Shares are not fully called, then disclose the called up value per share.

(c) Face/Par Value per Share

Face/Par Value, as per Capital Clause in Memorandum of Association should be disclosed.

(d) Reconciliation of No. of Shares

• For the Amount of Share Capital;

• For comparative previous period;

• Separate statements for both Equity and Preference Shares, which should again be sub-classified and represented for each class of Shares.
| (e) Rights, Preferences and Restrictions attaching to shares including restrictions on the distribution of Dividends and the Repayment of Capital | • For Equity Share Capital, such rights / preferences / restrictions may be with voting rights, or with differential voting rights as to dividend, voting or otherwise as per Companies (Issue of Share Capital with Differential Voting Rights) Rules, 2001.  
• For Preference Shares, the rights include dividend and/or capital related rights. Further, Preference Shares can be cumulative, non-cumulative, redeemable, convertible, non-convertible, etc.  
• All such Rights, Preferences and Restrictions attached to each class of Shares, terms of redemption, etc., should be disclosed separately. |
|---|---|
| (f) Shares held in the Company held by its Holding Company or its ultimate Holding Company including Shares held by Subsidiaries or Associates of the Holding Company or the ultimate Holding Company in aggregate | • Disclose number of Shares held by the entire chain of Subsidiaries and Associates starting from the Holding Company and ending right up to the Ultimate Holding Company.  
• All such disclosures should be made separately representing for each class of Shares, (for both Equity and Preference Shares). |
| (g) List of Shareholders holding more than 5% shares as on the Balance Sheet Date | • Date for computing the 5% limit should be taken as the Balance Sheet date. So, if during the year, any Shareholder held more than 5% Equity Shares but does not hold as much at the Balance Sheet date, disclosure is not required.  
• Companies should disclose the Shareholding for each class of Shares, both within Equity and Preference Shares. So, such% should be computed separately for each class of Shares.  
• This information should also be given for comparative previous period. |
| (h) Shares Reserved for issue under Options and Contracts/commitments for the sale of Shares/Disinvestment, including the Terms and Amounts | • Shares under Options generally arise under Promoters or Collaboration Agreements, Loan Agreements or Debenture Deeds (includingConvertible Debentures), agreement to convert Preference Shares into Equity Shares, ESOPs or Contracts for supply of Capital Goods, etc.  
• Disclosure is required for the Number of Shares, Amounts and Other Terms for Shares so reserved. Such options are in respect of Unissued Portion of Share Capital |
(i) For the period of 5 years immediately preceding the date at which the Balance Sheet is prepared:
- Aggregate Number & Class of Shares allotted as Fully Paid and Up Pursuant to Contract(s) without payment being received in Cash
- Aggregate No. and Class of Shares allotted as fully Paid up by way of Bonus Shares
- Aggregate Number & Class of Shares bought back

Disclose only if such event has occurred during a period of 5 years immediately preceding the Current Year Balance Sheet date
- The aggregate number of shares allotted or bought back
- If the company is in operation for a period of less than 5 years, then disclosure should cover all such earlier financial years

Not to disclose the following allotments:
The following allotments are considered as Shares allotted for payment being received in cash, and hence should not be disclosed under this Clause – (a) If the subscription amount is adjusted against a bonafide debt payable in money at once by the Company, (b) Conversion of Loan into Shares in the event of default in repayment

(j) Terms of any Securities Convertible into Equity / Preference Shares issued along with the earliest date of conversion in descending order starting from the farthest such date

- In case of Compulsorily Convertible Securities, where conversion is done in fixed tranches, all the dates of conversion have to be considered.
- In case of Convertible Debentures/Bonds, etc., for the purpose of simplification, reference may also be made to the terms disclosed under the note on Long-Term Borrowings where these are required to be classified in the Balance Sheet, rather than disclosing the same against under this Clause.

(k) Calls Unpaid (showing aggregate value of Calls Unpaid by Directors and Officers)

Unpaid Amount towards Shares subscribed by the Subscribers of Memorandum of Association should be considered as ‘Subscribed and paid-Up Capital’ in the Balance Sheet and the Debts due from the Subscribers should be appropriately disclosed as an Asset in the B/Sheet.

(l) Forfeited Shares (amount originally paid up)

(1) (b) RESERVES & SURPLUS

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
</table>
| Reserves & Surplus shall be classified as – (a) Capital Reserves | • Capital Reserve is a Reserve of a Corporate Enterprise which is not available for distribution as Dividend.  
• Profit on Re-issue of Forfeited Shares is basically profit of a Capital Nature and, hence, it should be credited to Capital Reserve. |
(b) Capital Redemption Reserve  
Capital Redemption Reserve (CRR) is required to be created u/s 55 and 68 (for redemption of PSC and buyback of ESC), subject to conditions specified in the respective Sections.

(c) Securities Premium Reserve  
Sch III uses the term “Securities Premium Reserve” but the Act uses the term “Securities Premium Account”. Hence, the term used in the Act should be used.

(d) Debenture Redemption Reserve  
Debenture Redemption Reserve (DRR) is required to be created u/s 71, and maintained until such Debentures are redeemed. On redemption of the Debentures, the amounts no longer necessary to be retained in this Account should be transferred to the General Reserve.

(e) Revaluation Reserve  
Revaluation Reserve is a Reserve created on the revaluation of Assets or Net Assets of an Enterprise represented by the surplus of the estimated Replacement Cost or estimated market values over the Book Values thereof.

(f) Share Options Outstanding Account  
As per ICAI Guidance Note on ESOP, Share Options Outstanding should be shown as separate line item. Under Sch III, this line item should be shown separately under Reserves & Surplus.

(g) Other Reserves (specify the nature & purpose of each Reserve and the amount in respect thereof)  
This includes any other Statutory Reserves, e.g. Tonnage Tax reserve to be created under the Income Tax Act, 1961.

(h) Surplus, i.e., balance in Statement of P&L disclosing allocations & appropriations, such as, Dividend, Bonus Shares and Transfer to/from Reserves, etc.  
Appropriations to the Profit for the year (including carried forward balance) is to be presented under the main head ‘Reserves and Surplus’. Under Sch III, the Statement of P&L will no longer reflect any appropriations, like Dividends transferred to Reserves, Bonus Shares, etc.

Notes:
1. **Fund**: A Reserve specifically represented by Earmarked Investments shall be termed as a ‘Fund’.
2. **Profit and Loss Account (Dr.)**: Debit Balance Statement of P&L shall be shown as a Negative Figure under the head ‘Surplus’. Similar, the balance of ‘Reserves & Surplus’, after adjusting Negative balance of Surplus, if any, shall be shown under the head ‘Reserves & Surplus’ even if the resulting figure is in the negative.
(1) (c) MONEY RECEIVED AGAINST SHARE WARRANTS

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be shown as a separate line item on the face of Balance Sheet</td>
<td>In case of Listed Companies, Share warrants are issued to Promoters &amp; others in terms of the Guidelines for Preferential Issues, viz. SEBI (Issue of Capital and Disclosure Requirements), Guidelines, 2009. Effectively, Share Warrants are amounts which would ultimately form a part of the Shareholder’s Funds. Since Shares are yet to be allotted against the same, these are not reflected as a part of Share Capital, but as a separate line-item</td>
</tr>
</tbody>
</table>

(2) SHARE APPLICATION MONEY PENDING ALLOTMENT

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be shown as a separate line item on the face of Balance Sheet</td>
<td>Share Application Money not exceeding the Issued Capital and to the extent not refundable is to be disclosed as a separate line item after “Share Holders Funds” and before “Non-Current Liabilities”. If the Company’s Issued Capital is more than the Authorized Capital, and approval of increase in Authorized Capital is pending, the amount of Share Application Money received over and above the Authorized Capital should be shown under the head “Other Current Liabilities”. The amount shown as ‘Share Application Money Pending Allotment’ will not include Share Application Money to the extent refundable, for example, the amount in excess of Issued Capital, or where Minimum Subscription requirement is not met. Such amount will have to be shown separately under ‘Other Current Liabilities’. Calls Paid in Advance are to be shown under “Other Current Liabilities”. The amount of interest which may accrue on such advance should also is to be reflected as a Liability.</td>
</tr>
</tbody>
</table>

(3) NON-CURRENT LIABILITIES

(3) (a) LONG-TERM BORROWINGS

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Term Borrowings shall be classified as – (a) Bonds/Debentures,</td>
<td>-----</td>
</tr>
<tr>
<td>(b) Terms Loans – (i) from Banks, and (ii) from Other Parties,</td>
<td>Loans with repayment period beyond 36 months are usually known as “Term Loans”. So, Cash Credit, Overdraft and Call Money Accounts/ Deposits are not covered by the expression “Term Loans”.</td>
</tr>
</tbody>
</table>
### Lesson 2  
**Introduction to Corporate Accounting**

<table>
<thead>
<tr>
<th>(c) Deferred Payment Liabilities,</th>
<th>Deferred Payment Liabilities would include any Liability for which payment is to be made on deferred credit terms, e.g., Deferred Sales Tax Liability, Deferred Payment for Acquisition of fixed Assets, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(d) Deposits,</td>
<td>Deposits classified under Borrowings would include Deposits accepted from Public and Inter-Corporate Deposits which are in the nature of Borrowings.</td>
</tr>
<tr>
<td>(e) Loans &amp; Advances from Related Parties,</td>
<td>Loans and Advances from related parties are required to be disclosed. Advances under this head should include those Advances which are in the nature of loans.</td>
</tr>
<tr>
<td>(f) Long-Term Maturities of Finance Lease Obligations,</td>
<td></td>
</tr>
<tr>
<td>(g) Other Loans &amp; Advances (specify nature)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. **Security-wise Classification:**
   
   Borrowings shall further be sub-classified as Secured and Unsecured. Nature of Security shall be specified separately in each case.

   - Nature of Security shall be specified separately in each case. A blanket disclosure of different securities covering all Loans classified under the same head such as “All Term Loans from Banks” will not suffice.
   - However, where one security is given for multiple Loans, the same may be clubbed together for disclosure purposes with adequate details of cross referencing.
   - Disclosure about the nature of security should also cover the type of asset given as security, e.g., Inventories, Plant and Machinery, Land and Building, etc.
   - When Promoters, other Shareholders or any third party have given any personal security for any borrowing, e.g., Shares or Other Assets held by them, disclosure should be made thereof, though such security does not result in the classification of such borrowing as secured.

2. **Guarantees:** Where Loans have been guaranteed by Directors or Others, the aggregate amount of such Loans under each head shall be disclosed.

   The word “Others” used in the phrase “Directors or Others” would mean any Person or Entity other than a Director, e.g., Related Parties, or any person associated with the Company in some manner.

3. **Maturity Datewise:** Bonds / Debentures (along with Rate of Interest & particulars of Redemption or Conversion, as the case may be) shall be stated in descending order of maturity or conversion, starting from farthest Redemption or Conversion Date, as the case may be.

   - Current Maturities of all Long-Term Borrowings will be disclosed under “Other Current Liabilities” and not under Long-Term Borrowings and Short-Term Borrowings.
   - So, it is possible that the same Bonds/Debentures/ Term Loans may be bifurcated under both “Long-Term Borrowings” as well as under “Other Current Liabilities”.


4. **Installment Redemption:** Where Bonds/Debentures are redeemable by Installments, the Date of Maturity for the purpose must be reckoned as the Date on which the First Installment becomes due.

5. **Power to Reissue:** Particulars of any redeemed Bonds/Debentures which the Company has power to reissue shall be disclosed.

6. **Terms of Repayment:**
   Repayment of Term Loans and Other Loans shall be stated. Other Loans should be interpreted to mean all categories listed under the heading ‘Long-Term Borrowings’ as per Sch VI (R). Disclosure of terms of repayment should be made preferably for each Loan unless the repayment terms of individual loans within a category are similar, in which case, they may be aggregated.

7. **Default:** Period and amount of continuing default as on the Balance Sheet date in repayment of Loans and Interest, shall be specified separately in each case. The term “Continuing Default” is used w.r.t. Long-Term Borrowings, whereas the term “Default” is used w.r.t. Short-Term Borrowings.
   - Under CARO, the Auditor shall report on the default made and the period of default.
   - As per Sch VI (R), the period and amount of continuing default as on the Balance Sheet date in repayment or Term Loans and Interest shall be specified separately in each case.
   - Disclosures relating to default should be made for all items listed under the category of Borrowings such as Bonds/Debentures, Deposits, Deferred Payment Liabilities, Finance Lease Obligations, etc., and not only to items classified as “Loans” such as Term Loans, Loans and Advances.
   - Defaults other than in respect of repayment of Loan and Interest, e.g., non-compliance with Debt Covenants, etc., need not be disclosed.
   - Any default that had occurred during the year and was subsequently made good before the end of the year need not be disclosed.

(3) (b) **DEFERRED TAX LIABILITIES** (Also Refer AS-22)

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be shown as a separate line item on the face of Balance Sheet.</td>
<td>----</td>
</tr>
</tbody>
</table>
(3) (c) OTHER LONG-TERM LIABILITIES

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>It shall be classified as –</td>
<td></td>
</tr>
<tr>
<td>(a) Trade Payables</td>
<td>Sundry Creditors for Goods or Services, and Acceptances should be disclosed as part of Trade Payables. Disclosure Requirements under MICRO, SMALL &amp; MEDIUM ENTERPRISES DEVELOPMENT (MSMED) Act will also be required to be made in the annual Financial Statements.</td>
</tr>
<tr>
<td>(b) Others</td>
<td>Amounts due under contractual obligations, e.g., payables in respect of statutory obligations, like contribution to Provident Fund, Purchase of Fixed Assets, Contractually Reimbursable Expenses, Interest Accrued on Trade Payables, etc., should be classified as “Others” and each such item should be disclosed naturewise.</td>
</tr>
</tbody>
</table>

(3) (d) LONG-TERM PROVISIONS

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>It shall be classified as –</td>
<td></td>
</tr>
<tr>
<td>(a) Provision for Employee Benefits</td>
<td>This should be classified into short-term and long-term portions, and the latter amount should be included here.</td>
</tr>
<tr>
<td>(b) Others (Specifying nature)</td>
<td>This would include items like Provisions for Warranties.</td>
</tr>
</tbody>
</table>

(4) CURRENT LIABILITIES

(4) (a) SHORT-TERM BORROWINGS

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Short-Term Borrowings shall be classified as –</td>
<td>• Short-Term Borrowings will include all Loans within a period of 12 months from the date of the loan, Loans payable on demand, etc., but they will not include Current Maturity of Long-Term Borrowings (which should be treated only as “Other Current Liabilities”).</td>
</tr>
<tr>
<td>• Loans Repayable on demand– (i) from Banks, &amp; (ii) Other Parties,</td>
<td>• In case of Short-Term Borrowings, all defaults (not continuing defaults as in the case of Long Term Borrowings) existing as at the date of the Balance Sheet should be disclosed (itemwise)</td>
</tr>
<tr>
<td>• Loans and Advances from Related Parties,</td>
<td>• A 3-Year Loan taken for a business with a 4-year Operating Cycle will be categorized only as Short-Term Borrowings, and not as Long-Term Borrowings.</td>
</tr>
<tr>
<td>• Deposits,</td>
<td></td>
</tr>
<tr>
<td>• Others Loans and Advances (specify nature)</td>
<td></td>
</tr>
<tr>
<td>2. Securitywise Classification: Borrowings shall further be sub-classified as Secured and Unsecured. Nature of security shall be specified separately in each case.</td>
<td></td>
</tr>
<tr>
<td>3. Guarantees: Where Loans have been guaranteed by Directors or others, the aggregate amount of such Loans under each head shall be disclosed.</td>
<td></td>
</tr>
<tr>
<td>4. Default: Period &amp; amount of default as on B/SHEET Date in repayment of Loans and Interest shall be separately in each case.</td>
<td></td>
</tr>
</tbody>
</table>
(4) (b) TRADE PAYABLES

As per Notification – G.S.R 679(E) (by Ministry of Corporate Affairs dated 4th September, 2015):

In exercise of the powers conferred by Sub-section (1) of Section 467 of the Companies Act, 2013 (18 of 2013), the Central Government hereby makes the following further alterations in Schedule III and the details relating to Micro, Small and Medium Enterprises shall be discussed in the notes.

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>It shall be classified as –</td>
<td></td>
</tr>
<tr>
<td>(A) Total outstanding dues of micro enterprises and small enterprises; and</td>
<td>• Liability for Capital Goods Purchases: Amount due towards purchase disclosed under “Other Current Liabilities” with a suitable description.</td>
</tr>
<tr>
<td>(B) Total outstanding dues of creditors other than micro enterprises and small enterprises.”</td>
<td>• Liability under Contractual Obligations: Liability towards Employees, Leases or other Contractual Liabilities should not be included under Trade Payables. Only “Commercial Dues” can be included under Trade Payables.</td>
</tr>
</tbody>
</table>

Note:

The following details relating to Micro, Small and Medium Enterprises shall be disclosed in the notes:

(a) The principal amount and the interest due thereon (to be shown separately) remaining unpaid to any supplier at the end of each accounting year;

(b) The amount of interest paid by the buyer in terms of Section 16 of the Micro, Small and Medium Enterprises Development Act, 2006, along with the amount of the payment made to the supplier beyond the appointed day during each accounting year;

(c) The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the interest specified under the Micro, Small and Medium Enterprises Development Act, 2006;

(d) The amount of interest accrued and remaining unpaid at the end of each accounting year; and

(e) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues above are actually paid to the small enterprise, for the purpose of disallowance of a deductible expenditure under Section 23 of the Micro, Small and Medium Enterprises Development Act, 2006.

(f) Explanation – the terms ‘appointed day’, ‘buyer’, ‘enterprise’, ‘micro enterprise’, ‘small enterprise’ and ‘supplier’ shall have the same meaning assigned to those under (b),(d),(e),(h),(m) and (n) respectively of Section 2 of the Micro, Small and Medium Enterprises Development Act, 2006.

(4) (c) OTHER CURRENT LIABILITIES

<table>
<thead>
<tr>
<th>Sch. III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>It shall be classified as –</td>
<td></td>
</tr>
<tr>
<td>(a) Current maturities of Long-Term Debt,</td>
<td>• The portion of Long Term Debts/ Lease Obligations, which is due for payments within 12 months of the reporting date is required to be classified under “Other Current Liabilities”, while the balance amount should be classified under Long-Term Borrowings.</td>
</tr>
<tr>
<td>(b) Current Maturities of Finance Lease Obligations,</td>
<td></td>
</tr>
<tr>
<td>(c) Interest Accrued but not due on Borrowings,</td>
<td></td>
</tr>
</tbody>
</table>
(d) Interest Accrued and due on Borrowings,
(e) Income Received in Advance,
(f) Unpaid Dividends,
(g) Application Money received for allotment of Securities and due for Refund and Interest Accrued thereon (Refer note below)
(h) Unpaid Matured Deposits and Interest Accrued thereon,
(i) Unpaid Matured Debentures and Interest Accrued thereon,
(j) Other Payables (specify nature).

Note:
1. Share Application Money includes Advances towards allotment of Share Capital.
2. Terms and Conditions include the Number of Shares proposed to be issued, the Amount of Premium, if any, and the period before which shares be allotted shall be disclosed.
3. It shall also be disclosed whether the Company has sufficient Authorized Capital to cover the Share Capital Amount resulting from Allotment of Shares out of such Share Application Money.
4. Further, the period for which the Share Application Money has been pending beyond the period for Allotment as mentioned in the document inviting application for shares along with the reason for such Share Application Money being pending shall be disclosed.
5. Share Application Money not exceeding the Issued Capital and to the extent not refundable shall be shown under the head ‘Equity’ and Share Application Money to the extent refundable, i.e., the amount in excess of subscription or in case the requirements of minimum subscription are not met, shall be separately shown under ‘Other Current Liabilities’.

(4) (d) SHORT TERM PROVISIONS

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>It shall be classified as – (a) Provision for Employee Benefits</td>
<td>This should be classified into short-term and long-term portions, and the former amount should be included here.</td>
</tr>
<tr>
<td>(b) Others (Specifying nature)</td>
<td>This includes Provision for Dividend, Provision for Taxation, Provision for Warranties, etc.</td>
</tr>
</tbody>
</table>
## 4C. DISCLOSURE REQUIREMENTS FOR “ASSETS” ITEMS

### (1) NON-CURRENT ASSETS

#### (1) (a) (i) TANGIBLE ASSETS (Also Refer AS – 6, 10)

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
</table>
| **1. Classification shall be given as –**
  (a) Land, (b) Buildings, (c) Plant and Equipment, (d) Furniture & Fixtures, (e) Vehicles, (f) Office Equipment, (g) Others (Specify Nature). | AS-19 excludes Land Leases from its scope. Leasehold Land should be presented as a separate assets class under **Tangible Assets**. Also, Freehold Land should be presented as a separate asset class. |
| **2. Assets under Lease shall be separately specified under each class of asset.** | • The term “under lease” should mean – (a) Assets given on Operating Lease in the case of lessor, and (b) Assets held under Finance Lease in the case of lessee. • Leasehold Improvements should continue to be shown as a separate asset class. |
| **3. Re-evaluation:** Where sums have been written off on a Reduction of Capital or Re-evaluation of Assets of where sums have been added on Re-evaluation of Assets, every Balance Sheet subsequent to date of such write off, in addition shall show the Reduced or Increased figures as applicable and shall be way of a Note also show the amount of the Reduction or Increase as applicable together with the date thereof for the first 5 years subsequent to the dare of such Reduction or Increase. | • AS-10 requires disclosure of details such as Gross Book Value of Re-evaluated Assets, Method adopted to compute re-evaluated amounts, Nature of indices used, Year of appraisal, Involvement of External Valuer, etc. as long as the concerned assets are held by the Enterprise. [but only 5 years period is specified in Sch III] • AS-10 requirements will preveail. [Note: AS-26 does not permit re-evaluation of Intangible Assets.] |
| **4. Reconciliation:** A Reconciliation of the Gross and Net Carrying Amounts of each Class of Assets at the Beginning and End of the Reporting period showing Additions, Disposals, Acquisitions through Business Combinations and other Adjustments and the related Depreciation and Impairment Losses / Reversals shall be disclosed separately. | (a) Since reconciliation of Gross and Net Carrying Amounts of Fixed assets is required, the Depreciation/Amortization for each class of asset should be disclosed in terms of – • Opening Accumulated Depreciation, • Depreciation/Amortization for the year, • Deductions/Other Adjustments, and • Closing Accumulated Depreciation/ Amortization (b) Similar disclosures should also be made for Impairment, if any, as applicable. (c) Business Combinations: • Business Combination should be taken as an amalgamation or acquisition or any other mode of restructuring of a set of Assets and/or a group of Assets and Liabilities constituting a business. |
• Acquisitions through ‘Business Combinations’ should be disclosed separately for each class of assets.
• Asset Disposals through Demergers, etc., if any also be disclosed separately for each class of assets.

(d) Other Adjustments: This includes –
• Capitalization of FOREX Differences where such option has been exercised by the Company as per AS-11.
• Adjustments on a/c of Exchange Fluctuations for Fixed Assets in case of Non-Integral Operations (AS-11).
• Borrowing Costs capitalized as per AS-16.

(1) (a)(ii) INTANGIBLE ASSETS (Also Refer AS-26)

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification shall be given as –</td>
<td></td>
</tr>
<tr>
<td>(a) Goodwill, (b) Brands / Trademarks, (c) Computer Software, (d) Mastheads and Publishing Titles, (e) Mining Rights, (f) Copyrights, and Patents and Other Intellectual Property Rights, Services and Operating Rights, (g) Recipes, Formula, Models, Designs and Prototypes, (h) Licenses and Franchise, (i) Others (specify nature).</td>
<td>Classification of Intangible Assets has been introduced under Sch VI (R). Intangible Assets under development should also be disclosed separately, if AS-26 criteria are met.</td>
</tr>
</tbody>
</table>

(1) (a)(iii) CAPITAL WORK IN PROGRESS

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be shown as a separate line item on the face of Balance Sheet</td>
<td>Capital Advances should be included under Long-Term Loans and Advances and hence, cannot be included under Capital WIP.</td>
</tr>
</tbody>
</table>

(1) (a)(iv) INTANGIBLE ASSETS UNDER DEVELOPMENT

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be shown as a separate line-item on the face of Balance Sheet</td>
<td>Intangible Assets under development should be disclosed under this head provided they can be recognized based on the criteria laid down in AS-26.</td>
</tr>
</tbody>
</table>
(1) (b) NON CURRENT INVESTMENTS (Also Refer AS – 13)

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
</table>
| Non-Current Investments shall be classified as Trade Investments and Other Investments, and further classified as Investments in –  
(a) Property,  
(b) Equity Instruments,  
(c) Preference Shares,  
(d) Government / Trust Securities,  
(e) Debentures or Bonds,  
(f) Mutual Funds,  
(g) Partnership Firms, and  
(h) Other Non-Current Investments (specify nature). | • If a Debenture is to be redeemed partly within 12 months and balance again after 12 months, the amount to be redeemed within 12 months should be disclosed as current, and balance as Non-Current.  
• “Trade Investment” is normally understood as an Investment made by a Company in Shares or Debentures of another Company, to promote the trade or business of the first Company. |

Notes:

1. Under each classification, details shall be given about the Names of Bodies Corporate (indicating separately whether such bodies are – (i) Subsidiaries, (ii) Associates, (iii) Joint Ventures, or (iv) Controlled Special Purpose Entities) in whom Investments have been made and the nature and extent of the Investment so made in each such Body Corporate (showing separately Investments which are partly-paid).

2. With regard to Investments in the capital of Partnership Firms, the Names of the Firms (with the names of all their Partners, Total Capital and the Shares of each Partner) shall be given.

(a) Controlled SPEs:

• Sch III requires separate disclosure of Investments in “Controlled Special Purpose Entities” in addition to Subsidiaries, Joint Venture, Associates, etc.

• Since the expression “Controlled SPEs” is not defined in the Act/Sch. III/AS, no disclosures would be additionally required to be made under this caption. If and when such terminology is explained/ introduced in the applicable AS, the disclosure requirement would become applicable.

(b) Other Points: “Nature and Extent” of Investment in each Body Corporate should be interpreted to mean the Number and Face Value of Share. Also, it is advisable to clearly disclose whether Investments are fully paid or partly paid. (itemwise)

(a) LLP: A LLP is a Body Corporate, and not a Partnership Firm as envisaged under the Partnership Act, 1932. Hence, disclosures pertaining to Investments, in Firms will not include LLPs. Investments in LLPs will be disclosed separately under “Other Investments”.

(b) Change in Constitution: In case of change in constitution of the Firm during the year, the names of the Other Partners should be disclosed based on the position existing as on the date of Company’s B/s.
(c) Capital:

- The Total Capital of the Firm, to be disclosed, should be with reference to the Amount of Capital on the date of the Company’s Balance Sheet.

- If the Partnership Firm has separate accounts for Partners’ Capital, Drawings or Current, Loans to or from Partners, etc. disclosure must be made with regard to the Total of Capital Accounts alone, since this is what constitutes the capital of the Partnership Firm.

- Where, however, such Accounts have not been segregated, or where the Partnership Deed Provides that the Capital of each Partner is to be calculated by reference to the Net Amount at his credit after merging all the Accounts, the disclosure relating to the Partnership Capital must be made on the basis of the total effect of such accounts taken together.

(d) Share of each Partner: Share of each Partner means share in the Profits of the Firm, rather than the share in the Capital.

(e) Different Reporting Dates: If it is not practicable to draw up the Financial Statements of the Partnership upto such date and, are drawn upto different reporting dates, drawing analogy from AS-21 and AS-27, adjustments should be made for effects of significant transactions or other events that occur between those dates and the date of the Partners’ Financial Statements. Also, the difference between reporting dates should not be more than 6 months. In such cases, the difference in reporting dates should be disclosed.

3. Investments carried at other than at Cost should be separately stated specifying the basis for valuation thereof.

<table>
<thead>
<tr>
<th>Basis of Valuation:</th>
<th>Disclosure for the basis of valuation of Non-Current Investments may be either of – (a) Cost, or (b) Costless Provision for other than temporary diminution, or (c) Lower of Cost and Fair Value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. The following shall also be disclosed- (a) Aggregate amount of Quoted Investments and Market Value thereof, (b) Aggregate Amount of Unquoted Investments, (c) Aggregate Provision for Diminution in value of Investments.</td>
<td>It is recommended to disclose the amount of provision netted-off for each Long-Term Investment. However, the aggregate amount of provision made in respect of all Non-Current Investments should also be separately disclosed to comply with the specific disclosure requirement in Sch III.</td>
</tr>
</tbody>
</table>

(1) (c) DEFERRED TAX ASSET (Also Refer AS – 22)

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be shown as a separate line-item on the face of Balance Sheet.</td>
<td>—</td>
</tr>
</tbody>
</table>
### (1) (d) LONG TERM LOANS AND ADVANCES

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. General Classification:</strong> Long-Term Loans and Advances shall be classified as –</td>
<td>Capital Advances:</td>
</tr>
<tr>
<td>(a) Capital Advances,</td>
<td>• It should be specifically included under Long-Term Loans and Advances and hence, cannot be included under Capital Work-In-Progress.</td>
</tr>
<tr>
<td>(b) Security Deposits,</td>
<td>• Capital Advances are advances given for procurement of Fixed Assets which are Non-Current Assets. They are not realized back in cash, and over a period, get converted into Fixed Assets. Hence, they are always Long-Term Advances, irrespective of when the Fixed Assets are expected to be received.</td>
</tr>
<tr>
<td>(c) Loans and Advances to Related Parties (giving details thereof),</td>
<td>Other Loans and Advances should include all other items in the nature of advances recoverable in cash or kind, e.g., Prepaid Expenses, Advance Tax, CENVAT Credit Receivable, VAT Credit Receivable and Service Tax Credit Receivable which are not expected to be realized within the next 12 months or operating cycle whichever is longer, from the Balance Sheet date.</td>
</tr>
<tr>
<td>(d) Other Loans and Advances (specify nature)</td>
<td>–</td>
</tr>
</tbody>
</table>

| **2. Securitywise Classification:** The above shall be separately sub-classified as – | – |
| (a) Secured, considered Good | – |
| (b) Unsecured, considered Good | – |
| (c) Doubtful. | – |

| **3. Bad / Doubtful:** Allowance for Bad and Doubtful Loans and Advances shall be disclosed under the relevant heads separately. | – |

| **4. Directors, etc.:** Loans and Advances due by Directors or Other Officers of the Company or any of them either severally or jointly with any other persons or amounts due by Firms or Private Companies respectively in which any Director is a Partner in a Director of a Member should be separately stated. | The term “Details” of Loans and Advances of Related Parties would mean disclosure requirements contained in AS-18. |

### (1) (e) OTHER NON-CURRENT ASSETS

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Other Non-Current Assets shall be classified as</strong> – (a) Long-term Trade Receivables (including Trade Receivables on Deferred Credit Terms) (b) Others (specify nature)</td>
<td>• A Receivable shall be classified as ‘Trade Receivable’ if it is in respect of the amount due on account of goods sold or services rendered in the normal course of business.</td>
</tr>
</tbody>
</table>
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2. **Securitywise Classification:** Long-Term Receivables shall be separately subclassified as – (a) Secured, considered good (b) Unsecured, Considered Good (c) Doubtful.  

3. **Bad / Doubtful:** Allowance for Bad and Doubtful Loans and Advances shall be disclosed under the relevant heads separately.  

4. **Directors, etc.:** Debts due by Directors or Other Officers of the Company or any of them either severally or jointly with any other person or Debts due by Firms or Private Companies respectively in which any Director is a Partner, or a Director, or a Member should be separately stated.  

**(2) CURRENT ASSETS**

(2) (a) **CURRENT INVESTMENTS** (Also Refer AS – 13)

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
</table>
| Current Investments shall be classified as –  
(a) Investments in Equity Instruments,  
(b) Investment in Preference Shares,  
(c) Investments in Government or Trust Securities,  
(d) Investments in Debentures or Bonds,  
(e) Investments in Mutual Funds,  
(f) Investments in Partnership Firms,  
(g) Other Investments (specify nature).  
**Notes:**  
1. Under each classification, details shall be given of Names of Bodies Corporate [indicating separately whether such Bodies are – (i) Subsidiaries, (ii) Associates, (iii) Joint Ventures, or (iv) Controlled Special Purpose Entities] in whom Investments have been made and the nature and extent of the Investment so made in each such Body Corporate (showing separately investments which are party-paid). In regard to Investments in the Capital of Partnership Firms, the names of the Firms (with the names of all their Partners, Total Capital and the percentage of Shares of each Partner) shall be given.  
2. The following shall also be disclosed:  
(a) Basis of Valuation of individual Investments,  
(b) Aggregate Amount of Quoted Investments and Market Value thereof,  
(c) Aggregate Amount of Unquoted Investments,  
(d) Aggregate Provision made for Diminution in Value of Investments.  
| Principles given for Non-current Investments will apply here also to the relevant. However, Trade vs Non-Trade Classification, is not required for Current Investments. |
### (2) (b) INVENTORIES (Also Refer AS-2)

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventories shall be classified as –</td>
<td></td>
</tr>
<tr>
<td>(a) Raw materials,</td>
<td>• Goods in Transit should be included under relevant heads with suitable disclosure.</td>
</tr>
<tr>
<td>(b) Work In Progress,</td>
<td>• The heading “Finished Goods” should comprise all Finished Goods other than those acquired for trading purposes. Those acquired for trading purposes are to be shown under “Stock in Trade”.</td>
</tr>
<tr>
<td>(c) Finished Goods,</td>
<td></td>
</tr>
<tr>
<td>(d) Stock-in-Trade (in respect of goods acquired for Trading),</td>
<td></td>
</tr>
<tr>
<td>(e) Stores and Spares,</td>
<td></td>
</tr>
<tr>
<td>(f) Loose Tools,</td>
<td></td>
</tr>
<tr>
<td>(g) Others (specify nature)</td>
<td></td>
</tr>
<tr>
<td>Note: Goods-in-Transit shall be disclosed under the relevant subhead of Inventories. Mode of Valuation shall be stated.</td>
<td></td>
</tr>
</tbody>
</table>

### (2) (c) TRADE RECEIVABLES

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aggregate amount of Trade Receivables outstanding for a period exceeding 6 months from the date they are due for payment should be separately stated.</td>
<td>• Sch III requires separate disclosure of “Trade Receivables O/s for a period exceeding 6 months from the date they become due for payment”, only for the current portion of Trade Receivables.</td>
</tr>
<tr>
<td>2. Securitywise Details: Trade Receivables shall be separately subclassified as –</td>
<td>• Where no due date is specifically agreed upon, normal credit period allowed by the Company should be taken into consideration for computing the due date, which may vary depending upon the Nature of Goods or Services sold and the Type of Customers, etc.</td>
</tr>
<tr>
<td>(a) Secured, considered Good</td>
<td>• Amounts due under contractual obligations, e.g., dues in respect of Insurance Claims, Sale of Fixed Assets, Contractually Reimbursable Expenses, Interest Accrued on Trade Receivables, etc., cannot be included within Trade Receivables. Such Receivables should be classified as “Other Current Assets” and each such item should be disclosed naturewise.</td>
</tr>
<tr>
<td>(b) Unsecured, considered Good</td>
<td>• Lean Period Activities: Receivables arising out of sale of materials / rendering of services during a Company's lean period, should be included under “Trade Receivables”, if such activity is in the normal course of business. If they are not part of “normal course of business”, they are to be classified under “Other Assets”.</td>
</tr>
<tr>
<td>(c) Doubtful.</td>
<td></td>
</tr>
<tr>
<td>3. Bad /Doubtful: Allowance for Bad and Doubtful Loans and Advances shall be disclosed under the relevant heads separately.</td>
<td></td>
</tr>
<tr>
<td>4. Directors, etc: Debts due by Directors or Other Officers of the Company or any of them either severally or jointly with any other person or debts due by Firms or Private Companies, respectively in which any Director is a Partner, or a Director, or a Member should be separately stated.</td>
<td></td>
</tr>
</tbody>
</table>
(2) (d) CASH AND CASH EQUIVALENTS (Also Refer AS-3)

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
</table>
| Cash and Cash Equivalents shall be classified as –  
  (a) Balances with Banks,  
  (b) Cheques, Drafts on Hand,  
  (c) Cash on Hand,  
  (d) Other (Specify nature). |  
  • “Other Bank Balances” would comprise items like Balances with Banks to the extent of holding as Margin Money or Security against Borrowings, etc., and Bank Deposits with more than 3 months maturity.  
  • Bank Deposits with more than 12 months maturity will also need to be separately disclosed under the above subhead.  
  • The Non-Current Portion of each of the above balances should be classified under the head “Other Non-Current Assets” with separate disclosure thereof.  
  Notes:  
  • Earmarked Balances with Banks (e.g. for Unpaid Dividend) shall be separately stated.  
  • Balances with Banks to the extent held as margin Money or Security against the Borrowings, Guarantees, Other Commitments shall be disclosed separately.  
  • Repatriation restrictions, if any, in respect of Cash and Bank Balances shall be separately stated.  
  • Bank Deposits with more than 12 months Maturity shall be disclosed separately. |

(2) (e) SHORT TERM LOANS AND ADVANCES

<table>
<thead>
<tr>
<th>Schedule III Disclosure Requirement</th>
<th>Points</th>
</tr>
</thead>
</table>
| 1. General Classification: Short-Term Loans and Advances shall be classified as –  
  (a) Loans and Advances to Related Parties (giving details thereof),  
  (b) Others (specify nature).  
  2. Securitywise Classification: The above shall also be subclassified as-  
  (a) Secured, considered Good,  
  (b) Unsecured, considered Good,  
  (c) Doubtful  
  3. Bad / Doubtful: Allowance for Bad and Doubtful Loans and Advances shall be disclosed under the relevant heads separately.  
  4. Directors, etc.: Loans & Advances due by Directors or Other Officers of the Company or any of them either severally or Jointly with any other person or amounts due by Firms or Private Companies, respectively in which any Director is a Partner or a Director or a Member shall be separately stated. |  
  Principles given for Long-Term Loans and Advances will apply here to the relevant extent. |
(f) OTHER CURRENT ASSETS

Schedule III Disclosure Requirement | Points
--- | ---
• This is an all-inclusive heading, which incorporates Current Assets which do not fit into any other Asset Categories. | • This is an all-inclusive heading, which incorporates Current Assets that do not fit into any other asset categories, e.g., Unbilled Revenue, Unamortized Premium on Forward Contracts, etc.
• Nature of each item should be specified | •
• In case any amount classified under this category is doubtful, it is advisable that such doubtful amount as well as any provision made there against should be separately disclosed.

Special Point: Unamortised portion of share issue expenses, etc.

1. Sch III does not contain any specifies disclosure requirement for the unamortized portion of expense items such as Share Issue Expenses, Ancillary Borrowing Costs and Discount or Premium relating to Borrowings.

2. As per AS-16, Ancillary Borrowing Costs and Discount or Premium relating to Borrowings could be amortized over the loan period. Further, share Issue Expenses, Discount on Shares, Ancillary Costs-Discount, Premium on Borrowing, etc. being special nature items, are excluded from the scope of AS-26 Intangible Assets.

3. Certain companies have taken a view that it is an acceptable practice to amortize these expenses over the period of benefit, i.e., normally 3 to 5 years.

4. Conclusion: Schedule III does not deal with any accounting treatment of these items, and the same continues to be governed by the respective AS / best practices. So, a Company can disclose the Unamortized Portion of such expenses as “Unamortized Expenses”, under the head “Other Current/Non-Current Assets”, depending on whether the amount will be amortized in the next 12 months or thereafter.

PART II-FORM OF STATEMENT OF PROFIT AND LOSS

Name of the Company: ..............................................................

Profit and Loss Statement for the year ended: ............................................ (Rs. in .......)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note No.</th>
<th>Figures for the Current Reporting Period</th>
<th>Figures for the Previous Reporting Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Revenue from Operations</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>II</td>
<td>Other Income</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>III</td>
<td>Total Revenue (I+II)</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td>IV</td>
<td>Expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cost of Materials Consumed</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td></td>
<td>Purchases of Stock-In-Trade</td>
<td>XXX</td>
<td>XXX</td>
</tr>
<tr>
<td></td>
<td>Changes in Inventories of Finished Goods / Work-in-progress and Stock-In-Trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee Benefits Expense</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Lesson 2  Introduction to Corporate Accounting  55

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance Costs</strong></td>
<td>Depreciation and Amortization Expense Other Expenses</td>
</tr>
<tr>
<td>V</td>
<td>Profit before Exceptional &amp; Extraordinary Items and Tax (III – IV)</td>
</tr>
<tr>
<td>VI</td>
<td>Exceptional Items</td>
</tr>
<tr>
<td>VII</td>
<td>Profit before Extraordinary Items and IAX (V–VI)</td>
</tr>
<tr>
<td>VIII</td>
<td>Extraordinary Items</td>
</tr>
<tr>
<td>IX</td>
<td>Profit before Tax (VII–VIII)</td>
</tr>
<tr>
<td>X</td>
<td>Tax Expenses:</td>
</tr>
<tr>
<td>(1) Current Tax</td>
<td></td>
</tr>
<tr>
<td>(2) Deferred Tax</td>
<td></td>
</tr>
<tr>
<td>XI</td>
<td>Profit /(Loss) for the period from Continuing Operations (IX – X)</td>
</tr>
<tr>
<td>XII</td>
<td>Profit /(Loss) from Discontinuing Operations</td>
</tr>
<tr>
<td>XIII</td>
<td>Tax Expense of Discontinuing Operations</td>
</tr>
<tr>
<td>XIV</td>
<td>Profit /(Loss) from Discontinuing Operations (After Tax) (XII–XIII)</td>
</tr>
<tr>
<td>XV</td>
<td>Profit /(Loss) for the period (XI + XIV)</td>
</tr>
<tr>
<td>XVI</td>
<td>Earnings per Equity Share:</td>
</tr>
<tr>
<td>(1) Basic</td>
<td></td>
</tr>
<tr>
<td>(2) Diluted</td>
<td></td>
</tr>
</tbody>
</table>

### General Instructions for Preparation of Statement of P&L

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Sec.25 Companies</strong></td>
<td>The provisions of this part shall apply to the Income and Expenditure Account referred to in Sec. 129 of the Act, in the same manner as they apply to a Statement of Profit and Loss.</td>
</tr>
<tr>
<td><strong>2. Revenue from Operations</strong></td>
<td>For Company other than a Finance Company: Revenue from Operations shall be disclosed separately in the Notes, Revenue from – (a) Sale of Products (b) Sale of Services (c) Other Operating Revenues (d) Less: Excise Duty For Finance Company: Revenue from Operations shall include Revenue from: (a) Interest &amp; (b) Other Financial Services Revenue under each of the above heads shall be disclosed separately by way of Notes to Accounts to the extent applicable.</td>
</tr>
</tbody>
</table>
### 3. Finance Costs

Finance Costs shall be classified as –

(a) Interest Expenses,

(b) Other Borrowing Costs,

(c) Applicable Net Gain / Loss on Foreign Currency Transactions and Translation.

### 4. Other Income

Other Income shall be classified as –

(a) Interest Income (in case of a Company other than a Finance Company),

(b) Dividend Income,

(c) Net Gain/Loss on Sale of Investments,

(d) Other Non-Operating Income (Net of Expenses directly attributable to such income).

### 5. Additional Information:

A Company shall disclose by way of Notes, additional information regarding Aggregate Expenditure and Income on the following items referred below.

#### (i) Employee Benefits, Expense, Income Items, etc:

- (a) Employee Benefits Expense [showed separately – (i) Salaries & Wages, (ii) Contribution to PF and Other Funds, (iii) Expense on ESOP and Employee Stock Purchase Plan (ESPP), (iv) Staff Welfare Expenses]

- (b) Depreciation and Amortization Expenses,

- (c) Any item of Income of Expenditure which exceeds 1% of Revenue from Operations or ` 1,00,000 whichever is higher,

- (d) Interest Income,

- (e) Interest Expense,

- (f) Dividend Income,

- (g) Net Gain / Loss on Sale of Investments,

- (h) Adjustments to the Carrying Amount of Investments,

- (i) Net Gain / Loss on Foreign Currency Transaction & Translation (other than the cost considered as Finance Cost),

- (j) Payments to the Auditor as – (a) Auditor, (b) For Taxation Matters, (c) For Company Law Matters, (d) For Management Services, (e) For other Services, (f) For reimbursement of Expenses,

- (k) Item of Exceptional and Extraordinary Nature,

- (l) Prior Period Items.

#### (ii) Materials, Goods, Services, etc.

- (a) In the case of Manufacturing Companies –
  
  Raw Materials under broad heads.

  Goods Purchased under broad heads.

- (b) In the case of Trading Companies, Purchases in respect of goods Traded in by the Company under broad heads.
(c) In the case of Companies rendering or supplying services, Gross Income derived from Services Rendered or Supplied, are shown under broad heads.

(d) In the case of a Company, which falls under more than one of the categories mentioned in (a), (b) and (c) above, it shall be sufficient compliance with the requirements herein if Purchases, Sales and Consumption of Raw Material and the Gross Income from Services rendered is shown under broad head.

(e) In the case of Other Companies, Gross Income derived under broad heads are shown.

(iii) In the case of all concerns regarding Works-in-Progress are shown under broad heads.

(iv) Reserves – Creation & Utilization:
   (a) The aggregate, if material, of any amounts set aside or proposed to be set aside to Reserve, without including Provisions made to meet any Specific Liability, Contingency or Commitment known to exist at the date as to which the Balance Sheet is made up.
   (b) The aggregate, if material, of any amounts withdrawn from such Reserves.

(v) Provision – Creation & Utilization:
   (a) The aggregate, if material, of the amounts set aside to Provisions made for meeting Specific Liabilities, Contingencies or Commitments.
   (b) The aggregate, if material, of the amounts withdrawn from such provisions, as no longer required.

(vi) Expenses, etc: Expenditure incurred on each of the following items, separately for each item:
   (a) Consumption of Stores and Spare Parts,
   (b) Power and Fuel,
   (c) Rent,
   (d) Repairs of Buildings,
   (e) Repairs of Machinery,
   (f) Repairs of Machinery,
   (g) Insurance,
   (h) Rates and Taxes, excluding Taxes on Income,
   (i) Miscellaneous Expenses.

(vii) Subsidiaries Information:
   (a) Dividends from Subsidiary Companies.
   (b) Provisions for Losses of Subsidiary Companies.

(viii) FOREX Information: The P&L A/c shall also contain by way of a Note the following Information, namely –
   (a) Value of Imports calculated on CIF basis by the Company during the Financial Year in respect of – (I) Raw Materials, (II) Components and Spare Parts, (III) Capital Goods,
   (b) Expenditure in Foreign Currency during the Financial Year on account of Royalty, Know-How, Professional and Consultation Fees, Interest, and Other Matters,
   (c) Total Value if all Imported Raw Materials, Spare Parts and Components consumed during the Financial
Year and the Total Value of all Indigenous Raw Materials, Spare Parts and Components similarly consumed and the Percentage of each to the Total Consumption,

(d) Amount remitted during the year in Foreign Currencies on account of Dividends with a specific mention of the total number of Non-Resident Shareholders, the Total Number of Shares held by them on which the Dividends were due and the year to which the Dividends related.

(e) Earnings in Foreign Exchange classified under the following heads, namely-
- Export of Goods calculated on FOB Basis,
- Royalty, Know-How, Professional & Consultation Fees,
- Interest and Dividend,
- Other Income, indicating the nature thereof.

Note: Broad heads shall be decided taking into account the concept of Materiality and Presentation of True and Fair view of Financial Statements.

TRUE AND FAIR VIEW OF FINANCIAL STATEMENTS

According to Section 128(1) of the Companies Act, 2013, every company shall prepare and keep its registered office books of account and other relevant books and papers and financial statements for every financial year which give a true and fair view of the state of the affairs of the company.

Further Section 129(1) of the Companies Act, 2013, states that the financial statements shall give a true and fair view of the state of affairs of the company or companies, comply with the accounting standards notified under Section 133 and shall be in the form provided for different class or classes of companies in Schedule III. It also provides also that the financial statements shall not be treated as not disclosing a true and fair view of the state of affairs of the company, merely by reason of the fact that they do not disclose –

(a) in the case of an insurance company, any matters which are not required to be disclosed by the Insurance Act, 1938, or the Insurance Regulatory and Development Authority Act, 1999;

(b) in the case of a banking company, any matters which are not required to be disclosed by the Banking Regulation Act, 1949;

(c) in the case of a company engaged in the generation or supply of electricity, any matters which are not required to be disclosed by the Electricity Act, 2003;

(d) in the case of a company governed by any other law for the time being in force, any matters which are not required to be disclosed by that law.

Thus, the Companies Act requires that the profit and loss account must exhibit a true and fair view of the profit earned or loss suffered by the company during the period for which the account has been prepared. The term true and fair has not been defined nor has it been the subject of any judicial decision. But in order to show a true and fair view financial statement (Statement of Profit and Loss and Balance Sheet) should not mislead the user about the financial health of organization.

From the accounting point of view, the profit and loss account should be drawn upon the principles stated below:

(a) **Materiality**: All significant factors which will have an impact on the mind of the reader should be disclosed.

For example, if a large quantity of raw materials is sold and there is a amount of profit or loss, the sale should not be included in the Sales Account; instead, the cost of the materials should be deducted from materials consumed and the profit or loss on the sale of raw materials should be separately disclosed in the profit and loss account. The reader will then know why the profit or loss occurred and how much
it was; the reason will not be clear if the sale of raw materials is added to Sales or deducted from materials consumed. If, however, only a small quantity was sold leading to a rather insignificant profit or loss, separate disclosure is not necessary because such a disclosure will not change the impression of the reader about the profit situation.

What is material does not depend upon the judgment of the management. But the materiality of a figure should be judged from the point of view of both the total amount of the item and the amount of the profit or loss. In the above example, materiality has to be seen from the point of view of (i) the amount of materials consumed and (ii) the profit or loss during the year.

(b) **Prior-Period Items**: The rule in India is that once accounts are adopted at the annual general meeting, they cannot be reopened. If any error is discovered, it can be corrected only in the accounts of the subsequent period. Apart from errors, some of the accounts relating to the previous year may come to knowledge or may be ascertained only in the current year. Suppose rates have been revised with effect from October, 2006, but the decision was made only in March, 2008. The increased wages for 2007-08 can certainly be added to the 2007-2008 wages but the increased wages for six months of 2006-2007 will also have to be taken out into account. Errors and other items relating to the previous year should be shown separately in the profit and loss account, and not clubbed with the item relating to the current year unless the concerned amounts are not material. Preferably, errors and prior year items should be stated below the line, i.e., in the Profit and Loss Appropriation Account.

(c) **Extraordinary Items**: If expenses or income that do not arise in the ordinary course and are material they should be stated separately in the profit and loss account. For example, if a fixed asset is sold, its profit or loss has to be shown separately. Another example would be speculation loss or profit; yet another would be subsidy received from government for operational purposes.

(d) **Change in Accounting Policies**: It is well known that if there is any change in an accounting policy, say method of valuation of inventories or of change in depreciation, there has to be a disclosure about the fact of change and on profit or loss resulting from such a change.

---

**Lesson Round-Up**

- Final accounts of a company consist of balance sheet as at the end of the accounting period, and profit and loss account for that period.
- Section 129 of the Companies Act, 2013 prescribes the form and contents of balance sheet, and profit and loss account of a company.
- Balance sheet of a company shall be prepared according to Schedule III of the Companies Act, 2013.
- The Schedule III sets out minimum requirements for disclosure on the face of the Balance Sheet, and the Statement of Profit and Loss (hereinafter referred to as “Financial Statements”) and Notes.
- Statement of Profit & Loss of a company shall be prepared according to Part II of Schedule III of the Companies Act, 2013.
- Section 129(1) of the Companies Act 2013, states that the financial statements shall give a true and fair view of the state of affairs of the company or companies, comply with the accounting standards notified under section 133 and shall be in the form provided for different class or classes of companies in Schedule III.

**Self Test Questions**

1. The following information has been extracted from the books of account of Hero Cycle Ltd. as on 31st March, 2017:
<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr. (Rs. ‘000)</th>
<th>Cr. (Rs. ‘000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration Expenses</td>
<td>480</td>
<td></td>
</tr>
<tr>
<td>Cash at Bank and on Hand</td>
<td>228</td>
<td></td>
</tr>
<tr>
<td>Cash Received on Sale of Fittings</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Long-Term Loan</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Depreciation on Fixtures, Fittings, Tools and Equipment (1st April, 2016)</td>
<td></td>
<td>260</td>
</tr>
<tr>
<td>Distribution Costs</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>Factory Closure Costs</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Fixtures, Fittings, Tools and Equipment at Cost</td>
<td>680</td>
<td></td>
</tr>
<tr>
<td>Profit &amp; Loss Account (at 1st April, 2016)</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Purchase of Equipment</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Purchases of Goods for Resale</td>
<td>1710</td>
<td></td>
</tr>
<tr>
<td>Sales (net of Excise Duty)</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Share Capital</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td>(1,00,000 shares of Rs 10 each fully paid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock (at 1st April, 2016)</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Trade Creditors</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Trade Debtors</td>
<td>780</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,500</td>
<td>4,500</td>
</tr>
</tbody>
</table>

**Additional Information:**

1. The stock on 31st March, 2017 (valued at the lower cost or net realizable value) was estimated to be worth Rs. 2,00,000.

2. Fixtures, fittings, tools and equipment are all related to administration. Depreciation is charged at a rate of 20% per annum on the cost. A full year’s depreciation is charged in the year of acquisition, but no depreciation is charged in the year of disposal.

3. During the fiscal year from 1st April, 2016 to 31st March, 2017, the Company purchased equipment worth Rs. 1,20,000. It also sold some fittings (which had originally cost Rs. 60,000) for Rs. 10,000 and for which depreciation of Rs. 30,000 had been set aside.

4. The average income tax for the company is 50%. Factory closure cost is to be presumed as an allowable expenditure for income tax purposes.

5. The company proposes to pay a dividend of 20% per Equity Share.

Prepare Hero Cycle Ltd.’s Profit and Loss Account for the fiscal year from 1st April, 2016 to 31st March, 2017, and the Balance Sheet as on that date in accordance with the Companies Act, 2013 in Vertical Form.
Lesson 3
Accounting for Share Capital

LESSON OUTLINE

Share Capital- Meaning, Types and Disclosure
- Issue of Shares
- Accounting treatment of premium
- Forfeiture and Re-issue of Shares
- Buyback of Shares
- Bonus Shares
- ESOPs
- ESPS
- Rights Issue
- Sweat Equity Shares
- Redemption and Conversion
- Capital Redemption Reserve
- Underwriting
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

A share can be considered as a single unit of the total capital of a company. Every share is a unit of ownership and each shareholder who buys it has a part in the ownership of the company. A company, thus, raises its capital by selling the shares its company. Shares constitute the movable property which is transferable in a manner as is provided by the articles of the company. The objective of the lesson is to sensitize the students to different aspects of share capital and its accounting.

At the end of the lesson the student should:
- Understand the meaning of share capital, types of shares, a company’s capital structure and its disclosure in the balance sheet.
- Learn the accounting procedure of issuing of shares
- Specify the accounting treatment in case of forfeiture and reissue of shares
- Understand the nuances of redemption and concept of Capital Redemption Reserve
- Understand the aspects of ESOPs, Sweat Equity Shares and Bonus Shares along with the accounting
- Appreciate the procedure and accounting of buyback of shares.
- Enumerate the steps for Underwriting and its methods
- Distinguish between marked application sand unmarked applications along with determining the liability of underwriters
MEANING OF SHARES

According to Section 2(84) of the Companies Act, 2013, “share” means a share in the share capital of a company and its stock.

A share may be understood as an individual part or a singular unit into which the total share capital of a company is divided. Shares are used to raise the capital of a company and each share constitutes a unit of ownership which is offered for sale. A share represents a part of the share capital of the company.

For example, Company ABC has a share capital of Rs. 50,00,000 divided into 5,00,000 shares of Rs.10 each and Mr. Naveen is in possession of 6,000 shares, then he has a share of Rs. 60,000 in the share capital of the company.

The nature of shares of a company are considered as movable property which are transferable, as provided by the articles of the company.

Nominal Value/Share Denomination: Face value of the share which is the par value of the share.

**Meaning of Share Capital**

A company raises its capital by issuing its issue of shares to finance and carry out its business. The Memorandum of Association, which lays down the foundation of the company contains the amount of capital with which the company decides to register and the number of shares into which it is to be divided. It constitutes the basis of the capital structure of a company. When total capital of a company is divided into shares, then it is called share capital.

**Kinds of Share Capital**

The share capital of a company limited by shares can constitute of two kinds of share capital under the Companies Act, 2013, as follows:

![Share Capital Diagram]

I. **Equity Share Capital**: Equity share capital with reference to any company limited by shares means all share capital that does not come under preference share capital. Equity share capital can further be divided into the following types:
(i) with voting rights; or
(ii) with differential rights regarding dividend or voting or any other such rights.

II. Preference Share Capital: Preference, as the name suggests, with reference to any company limited by shares, refers to that share capital of the issued share capital of the company which would carry a preferential right with regard to-

- Payment of dividend-it can either be as a fixed amount or an amount calculated at a fixed rate, which may either be free of or subject to income tax; and
- Repayment- It is the case in winding up or repayment of capital, of the amount of the share capital paid up or deemed to have been paid up, whether or not, there is a preferential right to the payment of any fixed premium or premium on any fixed scale, specified in the memorandum or articles of the company.

Deemed preference share capital: The share capital is deemed to be preference share capital, notwithstanding that it is entitled to either or both of the following rights, namely:

- that in respect of dividends, in addition to the preferential rights to the payment of dividend, it has a right to participate, whether fully or to a limited extent, with capital not entitled to the preferential right aforesaid;
- that in respect of capital, in addition to the preferential right to the repayment, in case of a winding up, it has a right to participate, whether fully or to a limited extent, with capital not entitled to that preferential right in any surplus which may remain after the entire capital has been repaid.

The following table summarizes the major distinctions between Equity Share Capital and Preference Share Capital:

<table>
<thead>
<tr>
<th>Basis</th>
<th>Equity Shares</th>
<th>Preference shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Refund of Capital</td>
<td>On winding up, the equity share capital is paid after the preference share</td>
<td>On winding up, the preference share capital is paid before the equity share capital is paid or preference shareholders have preference to get refund of capital over equity shareholders</td>
</tr>
<tr>
<td></td>
<td>capital or equity shareholder receives residual amount</td>
<td></td>
</tr>
<tr>
<td>2. Right of Dividend</td>
<td>Dividend is paid on equity shares after payment of dividend on preference</td>
<td>Dividend is paid on preference shares before payment of dividend on equity shares</td>
</tr>
<tr>
<td></td>
<td>shares</td>
<td></td>
</tr>
<tr>
<td>3. Rate of Dividend</td>
<td>No fixed rate of dividend. It is decided by the board of directors every year</td>
<td>Fixed rate of dividend is paid as prescribed on the face of preference shares, e.g.,</td>
</tr>
<tr>
<td></td>
<td>and it varies periodically</td>
<td>Issue at 12%, in that case prefer shares would have 12% rate of dividend</td>
</tr>
<tr>
<td>4. Right to Vote</td>
<td>Equity shareholders have the right to vote in a meeting of shareholders and</td>
<td>In normal course of business, preference shareholders do not enjoy the right to vote</td>
</tr>
<tr>
<td></td>
<td>they elect the director for managing the company</td>
<td>in the meetings of shareholders.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>But they may have the right to vote but only in special circumstances.</td>
</tr>
<tr>
<td>5. Redemption</td>
<td>Equity shares are not redeemable; however, a company may buy back its equity</td>
<td>Preference shares are always redeemable</td>
</tr>
<tr>
<td></td>
<td>shares as conditions prescribed under Companies Act, 2013</td>
<td></td>
</tr>
</tbody>
</table>
TYPES/CLASSES OF PREFERENCE SHARES

(a) On basis of Dividend:
   
   (i) **Cumulative Preference Shares:** Cumulative preference shares are the preference shares whose holders are entitled to receive arrears of dividend before any dividend is paid on equity shares.

   (ii) **Non-cumulative Preference Shares:** Non-cumulative preference shares are the preference shares whose holders do not have the right to receive arrears of dividend. If no dividend is declared in any year due to any reason, they get nothing, nor can they claim unpaid dividend in any subsequent years.

(b) On basis of Participation

   (i) **Participating Preference Shares:** In addition to the fixed preference dividend, such shares carry a right to participate in the surplus profit, if any, after providing dividend at a stipulated rate to equity shareholders.

   (ii) **Non-Participating Preference Shares:** Such shares get only a fixed rate of dividend every year and do not have a right to participate in the surplus profit, if any.

(c) On basis of Convertibility

   (i) **Convertible Preference Shares:** They are preference shares with a right/option to get converted into equity shares

   (ii) **Non-Convertible Preference Shares:** These are preference shares which do not have the right/option to get converted into equity shares.

DISCLOSURE OF SHARE CAPITAL

Capital refers to the amount which is invested in a business with the basic aim of generating revenue. Capital is raised from public and people who contribute to the share capital are known as shareholders.

**Authorized Capital** is also known as Nominal or Registered Capital which means the maximum amount of capital a company can issue. It is disclosed in the Memorandum of Association.

**Issued Capital** is a part of Authorized capital which is offered to the public for subscription.

**Called Up Capital** is the amount of nominal value of shares that has been called up by the company for payment from the shareholder.

**Paid Up Capital** is that part of Called Up Capital which the members of company or shareholders have paid for.

The following table describes the disclosure of Share Capital, as included in the Liabilities column of the Balance Sheet of a company:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities:</strong></td>
<td></td>
</tr>
<tr>
<td>Share Capital:</td>
<td></td>
</tr>
<tr>
<td>Authorized Capital:</td>
<td></td>
</tr>
<tr>
<td>2,00,000 shares of Rs. 10 each</td>
<td>20,00,000</td>
</tr>
<tr>
<td>Issued Capital:</td>
<td></td>
</tr>
<tr>
<td>1,50,000 shares of Rs. 10 each</td>
<td>15,00,000</td>
</tr>
<tr>
<td>Subscribed Capital:</td>
<td></td>
</tr>
<tr>
<td>1,00,000 shares of Rs. 10 each</td>
<td>10,00,000</td>
</tr>
<tr>
<td>Paid up Capital</td>
<td></td>
</tr>
<tr>
<td>1,00,000 shares of Rs. 10 each, Rs 5 paid up</td>
<td>5,00,000</td>
</tr>
</tbody>
</table>
Procedure for Issue of Shares

To issue shares, a company has to follow a definite procedure with prescribed rules and regulations, which is controlled and regulated by the Companies Act, 2013 and the Securities Exchange Board of India (SEBI).

When a public company desires to raise capital by issuing its shares to the public, it must invite them to subscribe for the shares. The person who intends to become a shareholder must thus subscribe to those shares by making an application for the desired number of shares to the company. Consequently, the company will allot shares to the applicant.

Allotment means allocating or apportioning a certain number of shares to an applicant in response to his application. The company cannot allot more than the number of shares offered to the public for subscription through the prospectus. Moreover, the company cannot make allotment unless the amount stated in the prospectus as the minimum subscription has been subscribed and the sum payable on application for the stated amount has been received by the company.

If the number of shares applied for is less than the number of shares offered, the allotment can be only for the shares applied for, provided minimum subscription is raised. Shares can be issued either for cash or for consideration other than cash.

In general, shares are issued for cash. The company may call the share money either in one instalment or in two or more instalments.

Terms of Issue of Share

A. ISSUE OF SHARES AT PAR:

Shares are said to be issued at par when the issue price is equal to the face value or nominal value of the shares, i.e., when the issue price is Rs. 10 and face value is also Rs. 10. When the shares are issued, the company may ask for the payment of the shares either payable in lump sum/single instalment or in multiple installments.
(a) When shares are issued at par and are payable in full in a lump sum:

(1) On receipt of application money -

Bank A/c Dr. (With the amount received on application)

To Share Application A/c

(Being application money received on __ shares of Rs __ each)

(2) On allotment of shares -

Share Application A/c Dr. (With the money received on the number of

To Share Capital A/c shares allotted)

(Being application money transferred to share capital)

Additional Points to note:

(i) Although shares may be of either kind, i.e., equity shares or preference shares, but if only the term shares is used it means equity shares.

(ii) Separate share application account will be opened for each class of shares, i.e., equity share application account/preference share application account and the like

(iii) Unless shares are allotted by the company, the receipt of application money is simply an offer and cannot be credited to Share Capital Account.

(iv) Refund of application money: If the company fails to raise the minimum subscription, then no shares can be allotted and the application money has to be returned to the applicants. For this, the entry will be as follows:

Share Application and Allotment Dr. (With the application money received now refunded)

To Bank

(v) In actual practice, the cash transactions are not journalized but the same have to be entered in the cash (bank columns) book. The entry in the Cash Book (Bank columns) will be as follows:

Cash Book (Bank Columns)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
<th>Particulars</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Share Application A/c (Application money on shares @ Rs……per share)</td>
<td>XXX</td>
<td>By Share Application A/c (Refund of application money on shares @ Rs…… per share)</td>
<td>XXX</td>
</tr>
</tbody>
</table>

(b) When shares are issued at par and the amount is payable in installments:

When shares are not payable in lump sum/single installment, they can be called in number of installments. After allotment, whenever the need arises, the directors may require further installments from the shareholders towards payment of the value of shares subscribed by them. Such demands are termed as ‘calls’. The different calls are distinguished from one another by their serial numbers, i.e., first call, second call, third call and so on. The last installment is also termed the final call along with the number of the last call.

| 1st installment | Application Money |
| 2nd installment | Allotment Money |
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<table>
<thead>
<tr>
<th>Installment</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd installment</td>
<td>First Call Money</td>
</tr>
<tr>
<td>4th installment</td>
<td>Second Call Money</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Last installment</td>
<td>Final Call Money</td>
</tr>
</tbody>
</table>

Journal Entries

(i) On receipt of application money with the total amount received on application
Bank Dr.
To Share Application Account
(Being the application money received in respect of shares @ Rs.............. per share)

(ii) On allotment of shares: After receiving application within prescribed time, Board proceeds to allot shares.
Share Application Account Dr. (with the amount of application money on allotted)
Shares Dr.
To Share Capital Account
(Being the application money on allotted shares now transferred to share capital account)

(iii) On refund of application money on rejected applications
Share Application A/c Dr. (with the amount actually repaid)
To Bank A/c
(Being application money on shares refunded)

(iv) Allotment money becoming due and received (second installment)
Share Allotment Account Dr. (with the amount due on allotment)
To Share Capital Account
(Being the allotment money due in respect of allotment of shares @ Rs.............. each)

(v) On receipt of allotment money is received the following journal entry is made.
Bank Dr. (with the actual amount received as allotment money)
To Share Allotment Account
(Being the amount received on shares @ Rs..............each)

(vi) On making the first call
Share First Call Account Dr. (with the amount due on first call)
To Share Capital Account
(Being the amount due on first call @ Rs.............. per share on shares)

(vii) On receipt of first call money
Bank Dr. (with the amount received on first call)
To Share First Call Account
(Being the amount received in respect of first call @ Rs....... per share on ........ shares)
(viii) When second call is made
Share Second Call Account Dr. (with the amount due on second call)
To Share Capital Account
(Being the amount due on second call @ Rs......... per share on.... shares)

(ix) On receipt of second call money:
Bank Dr. (with the amount actually received on second call)
To Share Second Call Account
(Being the amount received in respect of second call @ Rs.....per share on....shares)

(x) When the final call is made:
Share Final Call Account Dr. (with the amount due on final call)
To Share Capital Account
(Being the amount due on final call @ Rs......... per share on....... shares)

(xi) On receipt of final call money:
Bank Dr. (with the amount actually received on final call)
To Share Final Call Account
(Being the amount received in respect of final call @ Rs.......... per share on ...... shares)

B. ISSUE OF SHARES AT PREMIUM:

A company can issue shares at face value. However, for good successful companies which attract higher value can issue shares at value higher than their face value. When shares are issued at a price higher than their face value, they are said to be issued at a premium. Thus, the excess of issue price over the face value is the amount of premium. For example, if a share of Rs. 10 is issued at Rs. 12, (Rs. 12 - 10) = Rs. 2 is the premium.

**Securities Premium Account:**

The premium on issue of shares is not to be treated as revenue profits. In fact it is considered as capital receipt.
As per the Companies Act, 2013, when a company issues shares at a premium, whether for cash or otherwise, a sum equal to the aggregate amount of the premium collected on shares must be credited to a separate account called “Securities Premium Account”. There are no restrictions in the Companies Act on the issue of shares at a premium, but there are certain restrictions at the time of its disposal.

**Restrictions on application of premium money received:** Under Section 52(2) of the Companies Act, 2013, the Securities Premium Account may be applied by the company -

(a) towards the issue of unissued shares of the company to the members of the company as fully paid bonus shares;
(b) in writing off the preliminary expenses of the company;
(c) in writing off the expenses of, or the commission paid or discount allowed on, any issue of shares or debentures of the company;
(d) in providing for the premium payable on the redemption of any redeemable preference shares or of any debentures of the company; or
(e) for the purchase of its own shares or other securities under section 68.

It is to be noted here that utilization of the amount of Securities Premium Account except in any of the modes specified above, will attract the provisions relating to the reduction of share capital of a company under the Section 66 of the Companies Act, 2013.

**Disclosure:** The Securities Premium Account must be shown as “Securities premium reserves” separately on the liabilities side of the balance sheet under the head “Reserves & Surplus”.

**Note:** The premium is usually payable with the installment due on allotment. However, some companies may charge premium with share application money or partly with share application money and partly at the time of allotment of shares. It may be included in call money also.

---

**ACCOUNTING TREATMENT OF THE ISSUE OF SHARES AT PREMIUM**

**Journal Entry**

When allotment money becomes due:

Share Allotment A/c Dr. (with the money due on allotment including premium)

To Securities Premium A/c (with the premium amount)

To Share Capital A/c (with the share allotment amount)

(Being allotment money due on shares issued at premium)

---

**C. ISSUE OF SHARES AT DISCOUNT:**

When the issue price of a share is less than its face value, it is said to have been issued at a discount. For example, if a company issues shares of Rs. 10 each at Rs. 9 each, the shares are said to be issued at a discount. The amount of discount would be to Rs. 1 per share (i.e. Rs. 10 – Rs. 9) in this case. Discount on shares is a loss to the company.

Prohibition on the issue of Shares on Discount: As per Section 53 of Companies Act, 2013, a company shall not issue shares at a discount except as provided in Section 54 for issue of sweat equity shares. Any share issued by a company at a discounted price shall be void.

Further Section 53(3) of Companies Act, 2013 mentions the penalty provisions which reads as: Where a company contravenes the provisions of this section, the company shall be punishable with fine which shall not
be less than one lakh rupees but which may extend to five lakh rupees and every officer who is in default shall be punishable with imprisonment for a term which may extend to six months or with fine which shall not be less than one lakh rupees but which may extend to five lakh rupees, or with both.

Subscription

Minimum Subscription – It is the minimum amount which has been mentioned in the prospectus that must be subscribed by the public before an allotment of any security can be made.

Prospectus: It is an invitation to public for subscription of shares or debentures.

Any company does not receive application equal to the number of shares offered for subscription and there may be either of the following two situations:

(i) Under Subscription

The issue is said to have been under subscribed when the company receives applications for less number of shares than offered to the public for subscription. In this case company does not face any problem regarding allotment since every applicant will be allotted the shares applied for, and the company can proceed with allotment provided the minimum subscription for shares is met.

(ii) Over Subscription

In case a company receives applications for more number of shares than the number of shares offered to the public for subscription, it is a case of over subscription. A company cannot allot more shares than what it has offered.

In case of over subscription company has the following options:

Option I

(i) Rejection of Excess Applications and Money Returned

The company may reject the applications for shares which are received in excess of the shares offered and a letter of rejection is sent to such applicants. In this case the application money received from these applicants is refunded to them in full.

The journal entry is as follows:

<table>
<thead>
<tr>
<th>Journal Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Application A/c</td>
</tr>
<tr>
<td>To Bank A/c</td>
</tr>
</tbody>
</table>

(Application money on … shares refunded to the applicants)
(ii) Excess application money adjusted towards sums due on allotment

Journal Entry
Share Application A/c Dr. (with Excess application money)
To Share Allotment A/c
(Excess application money adjusted towards sums due on allotment)

If the application money received on partially accepted applications is more than the amount required for adjustment towards allotment money, the excess money is refunded.

However, if the Articles of the company so authorise, the directors may retain the excess money as calls in advance to be adjusted against the call/calls falling due at a later date. The consent of the applicant has to be taken either by a separate letter or by inserting a clause in the company’s prospectus.

The company can retain the calls in advance at maximum to the amount as is sufficient to make the allotted shares fully paid up ultimately.

The following entry is made:

Journal Entry
Share Application A/c Dr. (with Excess application money left over the amount due on application and allotment)
To Call-in-advance A/c
(The adjustment of excess share application money retained as call-in advance in respect of ... shares)

Option II

Partial acceptance of Applications (Pro-rata acceptance):

In some cases, the company accepts the applications for subscription partially. It means that the company does not allot the full number of shares that are applied for. The shares are accepted in a ratio, as determined, this is known as pro-rata acceptance.

For example, if an applicant has applied for 5000 shares and is allotted only 2000 shares, then his application is said to have been partially accepted. The company may evolve some formula of accepting applications partially or making proportionate allotment. The Pro-rata allotment means that the applicants are allotted shares proportionately such that no applicant is refused of shares and no applicant allotted shares in full.

In such a case, the company adjusts the excess share money received on application towards share allotment money due on partially accepted applications.

The journal entry recording the adjustment of application money towards share allotment money, is as under:

Journal Entry
Share Application A/c Dr. (with Excess application money)
(Share application money transferred to Share Allotment Account in respect of ... shares)

Calls-in-Advance and Interest on Calls-in-Advance

Meaning: A company may receive the amount remaining unpaid on shares, from the shareholders, even though the amount has not been called up subject to the authorization in its articles. In a case where the number of shares allotted to a person is much smaller than the number applied for and the terms of issue permit the company to retain the amount received in excess of application and allotment money, it shall be calls-in-advance. Of course, the company can retain only so much as is required to make the allotted shares fully paid.
ultimately. On actual time when calls are made, the calls-in-advance account is ultimately closed by transfer to the relevant call accounts.

**Disclosure Treatment:** The money received on calls-in-advance does not become part of the share capital. It is shown under a separate heading, namely ‘calls-in-advance’ on the liabilities side of the Balance Sheet. Further, the liability to sundry shareholders is to be treated as outstanding liability and should be shown under the head “Current Liabilities” in the balance sheet.

It is to be noted that no dividend can be paid on calls-in-advance.

**Accounting Treatment**

(i) On receipt of call money in advance:

Bank Dr. (with the amount of call money received in advance)

To Call-in-Advance A/c

(Being the calls received in advance)

(ii) As and when calls are made:

Calls-in-Advance A/c Dr. (with the amount adjusted on relevant call

To Relevant Call A/c becoming due)

**Interest on Calls-in-Advance**

The amount received as calls-in-advance is a debt to the company and thus the company is liable to pay interest on the amount received as Calls-in-Advance from the date of receipt of the amount till the date when the call is scheduled and made due for payment.

Generally, the Articles of the company specify the rate at which interest will be payable on Calls-in-Advance. If the articles do not contain such rate, Table F of the Companies Act, 2013 will be applicable which leaves the matter to the Board of Directors to decide the rate of such interest, subject to a maximum rate of 12% p.a.

Note: Interest payable on Calls-in-Advance is a charge against the profits of the company. As such, Interest on Calls-in-Advance must be paid even when no profit is earned by the company.

**Accounting Treatment:**

(i) If Interest on Calls-in-Advance is paid in cash -

Interest on Calls-in-Advance A/c Dr. (with the amount of interest paid)

To Bank

(Interest on Calls-in-Advance paid @___% p.a. on Rs.__ for ___ months)

(ii) If interest on Calls-in-Advance is not paid in cash -

Interest on Calls-in-Advance A/c Dr. (with the amount of interest payable)

To Sundry Shareholders A/c

(iii) At the end of the year, when interest on Calls-in-Advance is transferred to Profit and Loss A/c -

Profit and Loss A/c Dr. (with the amount of interest)

To Interest on Calls-in-Advance A/c
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Calls-in-Arrear and Interest on Calls-in-Arrear

Meaning: When calls are made upon shares allotted, the shareholders holding the shares are bound to pay the call money within the date fixed for such payment. If a shareholder makes a default in payment of the call money within the appointed date, the amount thus failed for payment on a call is called Calls-in-Arrear.

Interest on Calls-in-Arrear:
The interest is recoverable according to the provisions in this regard in Articles of the company.

But if the Articles are silent, Table ‘F’ of Schedule I of the Companies Act, 2013, shall be applicable which prescribes that if a sum called in respect of shares is not paid before or on the day appointed for payment, the person who failed to pay shall pay thereof from the day appointed for payment to the time of actual payment at a rate not exceeding 10% per annum. However, the Directors have the right to waive the payment of interest on Calls-in-Arrear.

The interest on Calls-on-Arrear Account is transferred to the Profit and Loss Account at the end of the year.

Journal Entries

(i) When call money is in arrear:
   Calls-in-Arrear A/c Dr. (with the amount failed by the shareholders)
   To Relevant Call A/c

(ii) On receipt of amount of Calls-in-Arrear with interest, on a subsequent date:
   Bank Dr. (with the amount received)
   To Calls-in-Arrears A/c
   (Being Amount due on allotment/ call remaining unpaid now received on……)

Issue of Shares for Consideration other than Cash

Meaning: Any allotment of shares against which cash is not to be received is called ‘issue of shares for consideration other than cash’.

Case1: In some cases, shares are issued to the promoters of the company in lieu of the services provided by them during the incorporation of the company. This would generate good will.

Journal Entries

(i) During incorporation of Company
   Goodwill A/c Dr. (with the fair value of services, as agreed)
   To Share Capital

Case2: In case a company does not have sufficient funds for the purchase of fixed assets or for payment to creditors, it may offer and allot its shares to vendors/ creditors in lieu of cash.

Such shares may be issued by the vendors either (i) at par, or (ii) at a premium.

Journal Entries

(i) When assets are acquired from the vendors -
   Sundry Assets A/c (individually) Dr. (with the purchase price payable for the assets acquired)
   To Vendors

(ii) When fully paid shares are issued to vendors at par -
   Vendors Dr. (with the nominal value of the shares allotted)
   To Share Capital A/c
(iii) When fully paid shares are issued to vendors at a premium -

Vendors Dr. (with the purchase price)
To Share Capital A/c (with the nominal value of the shares allotted)
To Securities Premium A/c (with the amount of premium)

Case 3: Shares are also issued/ exchanged during a business purchase or merger of the companies. In such a situation, following entries are to be passed:

Journal Entries

(i) When purchase consideration is more than net assets acquired -
Sundry Assets A/c (individually) Dr. (at agreed purchase price)
Goodwill A/c (B/F) Dr. (at purchase price less net assets acquired)
To Sundry Liabilities
To Vendor

(ii) When purchase consideration is less than net assets acquired -
Sundry Assets A/c (individually) Dr. (at agreed price)
To Sundry Liabilities
To Vendor (at agreed price)
To Capital Reserve (B/F) (at difference of Purchase price & net assets acquired)

FORFEITURE OF SHARES

Meaning & Procedure: In case where a shareholder fails to pay the allotment money and/or calls made on him, his shares are liable to be forfeited. Forfeiture of shares may be said to be the compulsory termination of his membership by way of penalty for non-payment of allotment and/or any call money.

Effect: The effect of forfeiture of shares is that the defaulting shareholder loses all his rights in the forfeited shares and ceases to be a member of the company. The name of the shareholder is removed from the Register of Members and the amount already paid by him is forfeited. He is not entitled in future to dividends and rights of membership.
Illustration: S.K. Ltd. issued 100,000 shares of Rs. 10 each payable as Rs. 2 on application, Rs. 2 on allotment, Rs. 3 on first call and Rs. 3 on second and final call. Mr. Harish, the allottee of 100 shares, fails to pay the second and final call money made by the company. In this case if the Board of Directors decides to forfeit his shares, his membership will be cancelled and the amount of Rs 700 paid by him (on 100 shares Rs. 2 on application, Rs. 2 on allotment and Rs. 3 on first call per share) will be forfeited. Now Mr. Harish will no longer be the member of the company and the issued capital of the company will be reduced by Rs. 1000.

### Procedure for Forfeiture of Shares

Articles of Association of the Company provide the authority to forfeit shares to the Board of Directors.

- The Board has to give at least 14 days’ notice to the defaulting members calling upon them to pay outstanding amount, with or without interest as the case may be, before the specified date.
- The notice must also state that if the shareholders fail to remit the amount mentioned therein within the stipulated period, their shares will be forfeited.
- If they still fail to pay the amount within the specified period of time, the Board of Directors of the company may decide to forfeit such shares by passing a resolution.
- The decision regarding the forfeiture of shares should be communicated to the concerned allottees

**Disclosure:** Forfeited shares account is to be shown in the balance sheet by way of addition to the paid-up share capital on the ‘liabilities’ side, until the concerned shares are reissued.

### Accounting Treatment as per below cases:

**Issued at Par**

- Unpaid calls already transferred to Calls in Arrears & call accounts have been closed
- Unpaid calls Not yet transferred to Calls in Arrears

**Issued at premium**

- Originally issued at premium & premium was unpaid
- Originally issued at premium & premium was paid

**A: Forfeiture of Shares issued at par:**

The forfeiture of shares can be recorded in following two ways:

1. Where the unpaid calls have already been transferred to Calls-in-Arrear A/c and the respective call accounts have been closed:

   Share Capital A/c Dr. (with the amount of called up value of shares forfeited i.e. no. of shares forfeited x the called up value per share.)

   To Shares Forfeited A/c (with the amount already paid-up by the shareholders on the shares forfeited.)

   To Calls-in-Arrear A/c (with the amount of unpaid calls.)
OR

2. Where the unpaid calls have not been transferred to Calls-in-Arrear A/c and the respective call accounts are showing balances representing unpaid amounts:

Share Capital A/c Dr. (with the amount of called up value of shares forfeited i.e., no. of shares forfeited x the called up value per share.)

To Shares Forfeited A/c (with the amount already paid up by the shareholders on the shares forfeited.)

To Share Allotment A/c (with the amount failed on allotment, if any.)

To Share First Call A/c (with the amount failed on first call, if any.)

To Share Final Call A/c (with the amount failed on final call, if any.)

B. Forfeiture of Shares Issued at PREMIUM

Case 1: Where shares to be forfeited were issued at a premium and the premium money remained unpaid:

In such a case, the credit already given to the ‘Securities Premium A/c’ will be cancelled at the time of forfeiture of the shares by debiting the “Securities Premium A/c”.

Journal Entries

Share Capital A/c Dr. with the amount of called up value of shares forfeited, i.e., no. of shares forfeited x called up value per share. (excluding premium).

Securities Premium A/c Dr. (with the amount of premium money remaining unpaid on shares forfeited.)

To Shares Forfeited A/c (with the amount already paid by the shareholders on the shares forfeited.)

To Calls-in-Arrear A/c (with the amount unpaid on calls.)

Case 2: Where shares to be forfeited were issued at a premium and the premium money was duly received for the shares to be forfeited:

If the amount of premium on shares forfeited has been received by the company prior to the forfeiture, Securities
Premium Account shall not be affected. In this case, Securities Premium Account is already credited at the time of making the call and will not be cancelled when the shares are forfeited. In such a case, the accounting entry on forfeiture will be the same as the one passed in case of shares issued at par.

**Journal Entry**

<table>
<thead>
<tr>
<th>Account</th>
<th>Dr. Amount</th>
<th>Cr. Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital A/c</td>
<td>(with the amount of called up value of shares forfeited i.e. no. of shares forfeited x the called up value per share.)</td>
<td></td>
</tr>
<tr>
<td>To Shares Forfeited A/c</td>
<td>(with the amount already paid-up by the shareholders on the shares forfeited.)</td>
<td></td>
</tr>
<tr>
<td>To Calls-in-Arrear A/c</td>
<td>(with the amount of unpaid calls.)</td>
<td></td>
</tr>
</tbody>
</table>

**Illustration 1:**

M/s Herbal Tea Plantations Ltd. was registered with a capital of Rs 1 crore divided into equity shares of Rs 100 each. The company offered to public 50000 shares at a premium of Rs 20 per share. The amount on shares was payable as:

- Rs 25 on application
- Rs 50 (including Rs 20 premium) on allotment
- Rs 20 on first call and
- Rs 25 on final call.

Applications were received for 75000 shares. Shares were allotted to the applicants on prorata basis. Kanti Bhai who was allotted 500 shares did not pay the allotment money. He also failed to pay the first call. His shares were forfeited. Sheetal was holding 200 shares did not pay the first call. Final call was not made.

Make journal entries in the books of the company.

**Solution:**

<table>
<thead>
<tr>
<th>Date</th>
<th>particulars</th>
<th>Amount (Dr.)</th>
<th>Amount (Cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bank A/c</td>
<td>Dr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Share Application A/c</td>
<td></td>
<td>18,75,000</td>
</tr>
<tr>
<td></td>
<td>(Being application money received on 75000 shares @ Rs 25 per share)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Share Application A/c</td>
<td>Dr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Share Capital A/c</td>
<td></td>
<td>18,75,000</td>
</tr>
<tr>
<td></td>
<td>To Share Allotment A/c</td>
<td></td>
<td>12,50,000</td>
</tr>
<tr>
<td></td>
<td>(Application money of 50000 share transferred to share Capital A/c on their allotment and remaining adjusted towards shares allotment)</td>
<td></td>
<td>6,25,000</td>
</tr>
</tbody>
</table>
### Working Notes:

Shares applied for 75,000; Share Allotted 50,000

Ratio = 3 : 2

Kanti Bhai Number of shares holding = 500

Number of shares applied= 750

Excess application money received = 250 × 25 = Rs. 6,250

Share allotment money due = 500 × Rs. 50 = 25,000

Net Amount due after adjustment of excess application money= Rs. 25,000 – Rs. 6,250 = Rs. 18,750

<table>
<thead>
<tr>
<th>3</th>
<th>Share Allotment A/c</th>
<th>Dr.</th>
<th>25,00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To Share Capital A/c</td>
<td></td>
<td>15,00,000</td>
</tr>
<tr>
<td></td>
<td>To Securities premium A/c</td>
<td></td>
<td>10,00,000</td>
</tr>
<tr>
<td></td>
<td>(Allotment money due including premium)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
<th>Bank A/c</th>
<th>Dr.</th>
<th>18,56,250</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To Share Allotment A/c</td>
<td></td>
<td>18,56,250</td>
</tr>
<tr>
<td></td>
<td>(Allotment money received)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>Share First Call A/c</th>
<th>Dr.</th>
<th>10,00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To Share Capital A/c</td>
<td></td>
<td>10,00,000</td>
</tr>
<tr>
<td></td>
<td>(First Call money due)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6</th>
<th>Bank A/c</th>
<th>Dr.</th>
<th>9,86,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Calls-in-Arrears</td>
<td>Dr</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>To Share First Call A/c</td>
<td></td>
<td>9,99,000</td>
</tr>
<tr>
<td></td>
<td>(First call money received of 49300 shares, and of 200 shares debited to Calls in Arrears)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7</th>
<th>Share capital A/c</th>
<th>Dr.</th>
<th>37,500</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Securities premium A/c</td>
<td>Dr.</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>To Share Forfeited A/c</td>
<td></td>
<td>18,750</td>
</tr>
<tr>
<td></td>
<td>To Share Allotment A/c</td>
<td></td>
<td>18,750</td>
</tr>
<tr>
<td></td>
<td>To Share First Call A/c</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>(Forfeiture of 500 shares on non-payment of allotment and call money)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REISSUE OF FORFEITED SHARES

The Board of Directors can sell/re-issue or dispose off the forfeited shares on such terms as it deems fit. However, the amount receivable on re-issue of such shares together with the amount already received from the defaulting member shall not, in any case, be less than the face value of the shares. Forfeited shares may be re-issued at:

- PREMIUM
- PAR
- DISCOUNT

RE-ISSUE OF FORFEITED SHARES - AT PAR: In one of the cases, forfeited shares can be re-issued at par. In such a case, the entire amount standing to the credit of Shares Forfeited Account for those shares would be treated as net gain and transferred to Capital Reserve Account.

Journal entries

1. On re-issue of shares:
   Bank Dr. (with the amount received on reissue i.e. no. of shares re-issued x amount received per share.)
   To Share Capital A/c

2. On transfer of Shares Forfeited Account to Capital Reserve Account:
   Shares Forfeited A/c Dr. (with the forfeited amount on shares re-issued.)
   To Capital Reserve A/c

RE-ISSUE OF FORFEITED SHARES - AT A PREMIUM:

If forfeited shares are re-issued at a premium, the amount of such premium should be credited to Securities Premium Account.

Also, in such a case, the entire amount standing to the credit of Shares Forfeited Account would be treated as net gain and transferred to Capital Reserve Account.

Journal entries

1. On re-issue of shares:
   Bank Dr. (with the total amount received on re-issue.)
   To Share Capital A/c (with nominal value or paid-up value of shares.)
   To Securities Premium A/c (with the premium amount received.)

2. On transfer of Shares Forfeited A/c to Capital Reserve A/c:
   Shares Forfeited A/c Dr. (with the forfeited amount on shares re-issued)
   To Capital Reserve A/c

Note: There may arise a situation when only part of shares forfeited be re-issued. In such a case, only the
respective proportionate amount which represents the net gain on shares that are re-issued shall be transferred to the Capital Reserve Account and the remaining amount (balance) which represents the amount that is received on the forfeited shares, not yet re-issued, must be left in Shares Forfeited Account itself.

**Disclosure:** This amount is disclosed as addition to the paid up share capital on liabilities side of the balance sheet.

**Forfeiture and Re-issue of Shares Allotted on Pro-rata Basis in Case of Over-subscription**

In case where the shares of a Company are oversubscribed, it is not possible for the company to satisfy the demand of all the applicants. In such a case allotment may be made on a pro-rata basis, i.e., proportionately.

**Example:** Company A allots 10,000 shares on pro-rata basis among the applicants for 12,000 shares. In this case, the ratio between allotment of shares and application for shares will be 10,000: 12,000 or 5:6, i.e., those applying for every 6 shares will be allotted 5 shares. If shares are allotted on pro-rata basis, the excess application money received on shares allotted will be retained by the company and may be adjusted subsequently against allotment money and/or call money.

If such shares are subsequently forfeited for non-payment of allotment money and/or call money, the entries shall remain the same, but it may involve some difficulty in calculation. In such a case, it is to be noted carefully that if there is any excess amount received along with the application and it is adjusted against the allotment money which is failed by the shareholder, such amount should be deducted from the amount due on allotment to arrive at the net amount defaulted by the shareholder.

**Illustration 2:**

Kites Co. Ltd. invited applications for 20,000 of its Equity Shares of Rs. 10. Each at premium of Rs. 2 per share, payable as Rs. 3 on application, Rs 7 on allotment (including premium); and balance on first & final call.

Applications for 25000 shares were received, and it was decided –

1. To refuse allotment to applicant of 1000 shares
2. To allot in full to applicants of 4000 shares
3. To allot the balance of available shares on pro-rata basis.
4. To utilize the excess application money in part payment of allotment money

Mr. X, holding 200 shares to whom shares had been allotted on pro-rata basis failed to pay the amount due on allotment and call; Mr. Y holding 100 shares to whom full allotment was made failed to pay the amount due on call only. These shares were forfeited.

160 forfeited shares of Mr. X and 40 shares of Mr. Y were re-issued at a discount of Rs. 1 per share to Mr. Z.

Show the Journal entries including cash books of Kites Co. Ltd.
Solution:

**Kites Co. Ltd.**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Particulars</th>
<th>Amount(Dr.)</th>
<th>Amount(Cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bank A/c Dr. To Share Application A/c (Being application money received on 25000 shares @ Rs 3 per share)</td>
<td>75,000</td>
<td>75,000</td>
</tr>
<tr>
<td>2</td>
<td>Share Application A/c Dr. To Share Capital A/c To Share Allotment A/c (Application money transferred to share Capital A/c on their allotment and remaining adjusted towards shares allotment)</td>
<td>72,000</td>
<td>60,000 12,000</td>
</tr>
<tr>
<td>3</td>
<td>Share Allotment A/c Dr. To Share Capital A/c To Securities Premium A/c (Allotment money due including premium)</td>
<td>140,000</td>
<td>100,000 40,000</td>
</tr>
<tr>
<td>4</td>
<td>Share First Call A/c Dr. To Share Capital A/c (First Call money due on 20000 shares @ Rs 2)</td>
<td>40,000</td>
<td>40,000</td>
</tr>
<tr>
<td>5</td>
<td>Share capital A/c Dr. Securities premium A/c Dr. To Share Forfeited A/c To Share Allotment A/c To Share First Call A/c (Forfeiture of 200 shares of Mr. X and 100 shares of Mr Y)</td>
<td>3,000 250 1400 1250 600</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Share Forfeiture A/c Dr. To Share Capital A/c (Reissue of 200 shares @ 9 per share, as fully paid up)</td>
<td>1800</td>
<td>1800</td>
</tr>
<tr>
<td>7</td>
<td>Share forfeiture A/c Dr. To Capital reserve (Transfer to Reserve of equivalent amount)</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>
Cash Book (bank Columns)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Share Application A/c (25000 x 3)</td>
<td>75,000</td>
<td>By Share Application A/c</td>
<td>3,000</td>
</tr>
<tr>
<td>To Share Allotment A/c</td>
<td>126,750</td>
<td>By Balance c/d</td>
<td>2,39,900</td>
</tr>
<tr>
<td>To Share First Call A/c (19700 x 2)</td>
<td>39,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Share Capital A/c</td>
<td>1800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. Amounts not received on allotment from X
   - Shares applied by X (20000/16000) x 200 = 250 shares
   - Application money received from X (250 x 3) = Rs. 750
   - Amount adjustment towards Share Capital (200 x 3) = Rs. 600
   - Amount transferred to Share Allotment A/c = Rs. 150
   - Amount due on allotment (200 x 7) = Rs. 1400

2. Total amount received on allotment
   - Total amount due on allotment (20000 x 7) = Rs. 1,40,000
   - Less amount transferred from Sh. Application A/c (40000x3) = Rs. 12,000
   - Less Amount not received from X = Rs. 1250
   - Net Amount on allotment = Rs. 1,26,750

3. Amount forfeited from Mr. X
   - Amount received (250 x 3) = Rs. 750
   - Of this, transferred to Share capital (200 x 3) = Rs. 600
   - Amount transferred to share allotment = Rs. 150
   - Hence, amount forfeited = Rs. 600

4. Amount forfeited from Y
   - Amount paid for share capital (100 x 8) = Rs. 800
   - (Application = Rs. 3 + Allotment = 5)
   - This does not include the amount paid towards security premium as this amount is already credited, and is not to be transferred to Share Forfeiture A/c.

5. Amount transferred to Capital Reserve
   - Forfeited amount of Mr. X 160 shares (160 x 3) = 480
   - Forfeited amount of Mr. Y 40 shares (40 x 8) = 320
   - Less, utilization for discount on Reissue of shares = 200
   - Net amount = Rs. 600
Illustration 3:

Arjun & Co. Ltd. issued a prospectus offering 2,00,000 shares of Rs.10 each on the following terms:

- On Application: Rs. 1 per share
- On Allotment: Rs.3 per share (including premium of Rs. 2)
- On First Call (three months after allotment): Rs.4 per share
- On Second Call (three months after first call): Rs.4 per share

Subscriptions were received for 3,17,000 shares on 3rd April and the allotment was made on 30th April as under:

**Shares Allotted**

(i) Allotment in full (two applicants paid in full on allotment) in respect of 4,000 shares each

(ii) Allotment of two-thirds of shares applied for

(iii) Allotment of one-fourth of shares applied for

Cash amounting to Rs. 31,000 (being application money received with applications for 31,000 shares upon which no allotments were made) was returned to the applicants on 5th May. The amounts due were received on the due dates with the exception of the final call on 100 shares. These Shares were forfeited on 15th November and re-issued to Aayan on the 16th November for payment of Rs.9 per share. The company paid the interest due on calls-in-Advance on 31st October in cash.

Show the Journal and Cash Book Entries and draw a balance sheet of the Company giving effect to the above transactions.

**Solution:**

**Journal**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Amount(Dr.)</th>
<th>Amount(Cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 30</td>
<td>Share Application Account</td>
<td>Dr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Share Capital Account</td>
<td></td>
<td>2,86,000</td>
</tr>
<tr>
<td></td>
<td>To Share Allotment Account</td>
<td></td>
<td>2,00,000</td>
</tr>
<tr>
<td></td>
<td>(Being application money transferred to Share Capital Account on allotment of 2,00,000 shares and excess application money on 86,000 shares @ Rs. 1 per share utilized towards allotment)</td>
<td>86,000</td>
<td></td>
</tr>
<tr>
<td>“ 30</td>
<td>Share Allotment Account</td>
<td>Dr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Share Capital Account</td>
<td></td>
<td>6,00,000</td>
</tr>
<tr>
<td></td>
<td>To Securities Premium Account</td>
<td></td>
<td>4,00,000</td>
</tr>
<tr>
<td></td>
<td>(Being allotment money due on 2,00,000 shares @ Rs.3 per share including Rs.2 per share)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
July 31  | Share first Call Account  
To Share Capital Account  
(Being amount due in respect of first call on 2,00,000 shares @ Rs.4 per share)  
Dr. 8,00,000  

July 31  | Calls-in-Advance Account  
To Share First Call Account  
(Being first call money received on 8,000 shares @ Rs. 4 per share received in advance is debited to the Calls-in-Advance Account)  
Dr. 32,000  

Oct 31  | Share Second and final Call Account  
To Share Capital Account  
(Being amount due in respect of second and final call on 2,00,000 shares @ Rs.4 per share)  
Dr. 8,00,000  

Oct 31  | Calls-in-Advance Account  
To Share Second and Final Call Account  
(Being second call money received on 8,000 shares @ Rs. 4 per share received in advance is debited to the Calls-in-Advance Account)  
Dr. 32,000  

Nov. 15  | Share Capital Account  
To Share Second and final Call Account  
To Share Forfeited Account  
(Being forfeiture of 100 shares for non-payment of second and final call)  
Dr. 1,000  

Nov. 16  | Share Forfeited Account  
To Share Capital Account  
To Capital Reserve Account  
(Being discount allowed on re-issue of 100 forfeited shares @ Rs. 1 per share and profit on re-issue transferred to Capital Reserve Account)  
Dr. 600  

**CASH BOOK**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Amount</th>
<th>Date</th>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 3</td>
<td>To Share Application A/c</td>
<td>3,17,000</td>
<td>May 5</td>
<td>By Share Application A/c</td>
<td>31,000</td>
</tr>
<tr>
<td>April 30</td>
<td>To Share Allotment A/c</td>
<td>514,000</td>
<td>Oct 31</td>
<td>By Interest on Calls-in-Advance</td>
<td>1,440</td>
</tr>
<tr>
<td>April 30</td>
<td>To Calls-In-Advance A/c</td>
<td>64,000</td>
<td></td>
<td>By Balance c/d</td>
<td>23,99,060</td>
</tr>
</tbody>
</table>
Interest on Calls-in-Advance has been calculated as follows: Amount (Rs.)

On first call money from April 30 to July 31 @ 6% p.a. for 3 months
(Rs.32,000 * 6/100 * 3/12) 480

On second and final call money from April 30 to October 31 @ 6% p.a.
For 6 months (Rs.32,000 * 6/100 * 6/12) 960

1,440

Balance Sheet of Arjun & Co. Ltd.
As at March 31, 2017

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities:</td>
<td></td>
</tr>
<tr>
<td>Share Capital:</td>
<td></td>
</tr>
<tr>
<td>Issued, Subscribed and Paid Up:</td>
<td>20,00,000</td>
</tr>
<tr>
<td>2,00,000 shares of Rs. 10 each fully paid up</td>
<td></td>
</tr>
<tr>
<td>Reserves and Surplus:</td>
<td></td>
</tr>
<tr>
<td>Capital Reserve</td>
<td>500</td>
</tr>
<tr>
<td>Securities Premium Account</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Total</td>
<td>24,00,500</td>
</tr>
<tr>
<td>Assets:</td>
<td></td>
</tr>
<tr>
<td>Current Assets:</td>
<td></td>
</tr>
<tr>
<td>Cash at Bank</td>
<td>23,99,060</td>
</tr>
<tr>
<td>Interest on Calls in Advance Account (Pending adjustment)</td>
<td>1,440</td>
</tr>
<tr>
<td>Total</td>
<td>24,00,500</td>
</tr>
</tbody>
</table>

Working notes:

Analysis of Application Money Received

<table>
<thead>
<tr>
<th>Shares Applied</th>
<th>Shares Allotted</th>
<th>Amount Received @ Rs.1 per share</th>
<th>Application Money</th>
<th>Adjusted as Allotment Money</th>
<th>Money Returned to Applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>38,000</td>
<td>38,000</td>
<td>38,000</td>
<td>38,000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Buy-Back of Shares means the purchase of its own shares by the Company. It is kind of a corporate financial strategy and is an imperative mode of capital restructuring. It is a practice which is prevalent globally with the underlying objectives of increasing Earnings per Share, averting hostile takeovers, improving returns to the stakeholders and realigning the capital structure.

Buy-Back is an alternative way of Reduction of Share Capital. When a company has substantial cash resources, it may like to buy its own shares from the market particularly when the prevailing rate of its shares in the market is much lower than the book value or what the company perceives to be its true value. Buy back of shares enables the company to go back to its shareholders and offers to purchase from them the shares that they hold.

Free Reserves: ‘Reserves which, as per latest audited Balance Sheet of the company are free for distribution as dividend and shall include balance to the credit of Security Premium A/c but shall not include Share Application Money’.

Advantages of Buy Back:

I. To improve the earnings per share;

II. To improve return on capital, return on net worth and to enhance the long-term value for shareholders;

III. To provide an additional exit route to shareholders when shares are undervalued or thinly traded;

IV. It is an alternative mode of reduction in capital without requiring approval of the Court/CLB (NCLT),

V. To enhance consolidation of stake in the company;

VI. To prevent unwelcome takeover bids;

VII. To return surplus cash to shareholders;

VIII. To achieve optimum capital structure;

IX. To support share price during periods of sluggish market conditions;

X. To serve the equity more efficiently.

Example: Improvement in EPS can be explained by below example:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Pre Buy – Back</th>
<th>Post Buy – Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Number of Shares</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>EPS</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>

Further, given below is a table for relevant sections and their applicability:
RELEVANT EXTRACTS FOR SECTIONS 68, 69 AND 70 OF COMPANIES ACT, 2013 PROVIDES FOR BUY-BACK OF SHARES.

1. Purchase can be made out of:

According to section 68(1) of the Companies Act 2013, a company may purchase its own shares or other specified securities (referred to as buy-back) out of –

   (a) its free reserves;
   (b) the securities premium account; or
   (c) the proceeds of the issue of any shares or other specified securities:

However, no buy-back of any kind of shares or other specified securities shall be made out of the proceeds of an earlier issue of the same kind of shares or same kind of other specified securities.

2. Preliminary Conditions for buy-back:

According to section 68(2), following conditions must be satisfied in order to buy-back the shares:

   (a) must be authorized by its articles;
   (b) a special resolution has been passed at a general meeting of a company authorizing the buy-back, but the same is not required when:
      (i) the buy-back is 10% or less of the total paid-up equity capital and free reserves of the company; and
      (ii) such buy-back has been authorized by the Board by means of a resolution passed at its meeting;
   (c) the buy-back is twenty-five per cent or less of the aggregate of paid-up capital and free reserves of the company. But in case of Equity Shares, the same shall be taken as 25% of paid up equity capital only;
   (d) debt equity ratio should be 2:1, where debt is the aggregate of secured and unsecured debts owed by the company after buy-back and Equity is the aggregate of the paid-up capital and its free reserves;
   (e) all the shares or other specified securities for buy-back are fully paid-up;
   (f) if shares or securities are listed, buy-back will be in accordance with the regulations made by the Securities and Exchange Board in this behalf; and
   (g) the buy-back in respect of unlisted shares or other specified securities is in accordance with Share Capital and Debentures Rules, 2014.
   (h) no offer of buy-back shall be made within a period of one year from the date of the closure of the preceding offer of buy-back, if any.
3. Explanatory Statement

Section 68(3) spells out additional requirements as follows:

The notice of the meeting at which the special resolution is proposed to be passed shall be accompanied by an explanatory statement stating -

- a full and complete disclosure of all material facts;
- the necessity for the buy-back;
- the class of shares or securities intended to be purchased under the buy-back;
- the amount to be invested under the buy-back; and
- the time-limit for completion of buy-back.

As per the rules, following more details are to be included in the Explanatory Statement:

- the date of the board meeting at which the proposal for buy-back was approved by the board of directors of the company;
- the number of securities that the company proposes to buy-back;
- the method to be adopted for the buy-back;
- the price at which the buy-back of shares or other securities shall be made;
- the basis of arriving at the buy-back price;
- the maximum amount to be paid for the buy-back, and the sources of funds from which the buy-back would be financed;

Shareholding:

- the aggregate shareholding of the promoters and directors, where the promoter is a company, and of the directors and key managerial personnel as on the date of the notice convening the general meeting;
- the aggregate number of equity shares purchased or sold by persons mentioned in the sub-clause during a period of twelve months preceding the date of the board meeting at which the buy-back was approved and from that date till the date of notice convening the general meeting;
- the maximum and minimum price at which purchases and sales referred to in sub-clause (ii) were made along with the relevant date;

if the persons mentioned in l(i) intend to tender their shares for buy-back -

- the quantum of shares proposed to be tendered;
- the details of their transactions and their holdings for the last twelve months prior to the date of the board meeting at which the buy-back was approved including information of number of shares acquired, the price and the date of acquisition;

a confirmation that there are no defaults subsisting in repayment of deposits, interest payment thereon, redemption of debentures or payment of interest thereon, or redemption of preference shares or payment of dividend due to any shareholder, or repayment of any term loans, or interest payable thereon to any financial institution or banking company;

a confirmation:

- that the Board of Directors have made a full enquiry into the affairs and prospects of the company
and that they have formed the opinion- general meeting is convened that there shall be no grounds on which the company could be found unable to pay its debts;

(ii) that the company’s prospect for the year immediately following that date and its financial resources be available to meet its liabilities as and when they fall due, and the company shall not be rendered insolvent within a period of one year from that date; and

(iii) the directors have already taken into account the liabilities(including prospective and contingent liabilities), as if the company were being wound up under the provisions of the Companies Act, 2013.

(p) a report addressed to the Board of Directors by the company’s auditors stating that-

(i) they have inquired into the company’s state of affairs;

(ii) the amount of permissible capital payment for the securities in question is in their view properly determined;

(iii) that the audited accounts on the basis of which calculation with reference to buy-back is done is not more than six months old from the date of offer document; and

(iv) the Board of Directors have formed the opinion as specified in point ‘o’ on reasonable grounds and that the company, with regard to its state of affairs, shall not be rendered insolvent within a period of one year from that date.

Other Conditions for Buy-back

- Time period u/s Section 68(4): Every buy-back shall be completed within a period of one year from the date of passing of the special resolution, or as the case may be, the resolution passed by the Board.

- Options for buy-back: The buy-back can be:
  (a) from the existing shareholders or security holders on a proportionate basis;
  (b) from the open market;
  (c) by purchasing the securities issued to employees of the company pursuant to a scheme of stock option or sweat equity. [Section 68(5)]

- Solvency Declaration:

Before making such buy-back, it has to be filed with the Registrar a declaration of solvency signed by at least two directors of the company, one of whom shall be the managing director, if any, Form No. SH.9 may be prescribed and verified by an affidavit to the effect that the Board of Directors of the company has made a full inquiry into the affairs of the company, as a result of which they have formed an opinion that it is capable of meeting its liabilities and will not be rendered insolvent within a period of one year from the date of declaration adopted by the Board. [Section 68(6)]

- Extinguish Certificate: Company shall extinguish and physically destroy the shares or securities so bought back within seven days of the last date of completion of buy-back. [Section 68(7)]

- No Further Issuance: When a company completes a buy-back of its shares or other specified securities, it shall not make a further issue of the same kind of shares or other securities including allotment of new shares or other specified securities within a period of six months except by way of:
  (a) issue a bonus, or
  (b) discharging of subsisting obligations, such as conversion of warrants, stock option schemes, sweat equity or conversion of preference shares or debentures into equity shares.
– Register to be maintained: A company shall maintain a register in Form No. SH.10 of the shares or securities so bought, the consideration paid for the shares or securities bought back, the date of cancellation of shares or securities, the date of extinguishing and physically destroying the shares or securities. The register of shares or securities bought back shall be maintained at the registered office of the company and shall be kept in the custody of the secretary of the company or any other person authorized by the board in this behalf. The entries in the register shall be authenticated by the secretary of the company or by any other person authorized by the Board for the purpose.

– Return of Buy-Back & Declaration: A company shall, after the completion of the buy-back under this section, file with the Registrar a return in Form No. SH.11 containing such particulars relating to the buy-back within thirty days of such completion. There shall be annexed to the return, a certificate in Form No. SH.15 signed by two directors of the company including the managing director, if any, certifying that the buy-back of securities has been made in compliance with the provisions of the Act and the rules made thereunder.

– Punishment for Default: If a company makes any default in complying with the provisions of this section, it shall be punishable with fine which shall not be less than one lakh rupees and which may extend to three lakh rupees and every officer of the company who defaults shall be punishable with imprisonment for a term which may extend to three years or with a fine which shall not be less than one lakh rupees and which may extend to three lakh rupees, or with both.

TRANSFER OF CERTAIN SUMS TO CAPITAL REDEMPTION RESERVES ACCOUNT (SECTION 69)

Capital Redemption Reserves: Where a company purchases its own shares out of free reserves or securities premium account, a sum equal to the nominal value of the shares so purchased shall be transferred to the capital redemption reserves account and details of such transfer shall be disclosed in the balance sheet.

Utilization: The capital redemption reserve account may be applied by the company, in paying up unissued shares of the company to be issued to its members as fully paid bonus shares.

PROHIBITION ON BUY-BACK IN FOLLOWING CIRCUMSTANCES: (SECTION 70)

Restrictions on Buy-Back : No company shall directly or indirectly purchase its own shares or other specified securities

(a) through any subsidiary company including its own subsidiary companies;  
(b) through any investment company or group of investment companies; or  
(c) through a default made by the company in the repayment of deposits accepted either before or after the commencement of this Act, interest payment thereon, redemption of debentures or preference shares or payment of dividend to any shareholder, or repayment of any term loan or interest payable thereon to any financial institution or banking company, provided that the buy-back is not prohibited, if the default is remedied and a period of three years has lapsed after such default ceased to subsist.

Prohibitions: No company shall, directly or indirectly, purchase its own shares or other specified securities in case such company has not complied with the provisions of:

(a) Sections 92: Annual Return  
(b) Section 123: Declaration and Payment of Dividend  
(c) Section 127: Failure to pay Dividend  
(d) Section 129: Failure to give True and Fair Statement
Rule 17: Buy-back of shares or other securities:

Unless stated otherwise, the following norms shall be complied with by the Private companies and Unlisted public companies for buy-back of their securities.

1. Information disclosure in Explanatory Statement to be annexed with Special Resolution and Notice of General Meeting:

The Explanatory Statement to be annexed to the notice of the general meeting pursuant to Section 102 shall contain the following disclosures, namely:-

(a) The date of the board meeting at which the proposal for buy-back was approved by the Board of Directors of the company;

(b) The objective of the buy-back;

(c) The class of shares or other securities intended to be purchased under the buy-back;

(d) The number of securities that the company proposes to buy-back;

(e) The method to be adopted for the buy-back;

(f) The price at which the buy-back of shares or other securities shall be made;

(g) The basis of arriving at the buy-back price;

(h) The maximum amount to be paid for the buy-back and the sources of funds from which the buy-back would be financed;

(i) The time-limit for the completion of buy-back;

   (i) The aggregate shareholding of the promoters and of the directors of the promoter, where the promoter is a company of the directors and key managerial personnel as on the date of the notice convening the general meeting;

   (ii) The aggregate number of equity shares purchased or sold by persons mentioned in sub-clause (i) during a period of twelve months preceding the date of the board meeting at which the buy-back was approved and from that date till the date of notice convening the general meeting;

   (iii) The maximum and minimum price at which purchases and sales referred to in sub-clause (ii) were made along with the relevant date;

(k) If the persons mentioned in sub-clause (i) of clause (j) intend to tender their shares for buy-back –

   (i) The quantum of shares proposed to be tendered;

   (ii) The details of their transactions and their holdings in the last twelve months prior to the date of the board meeting at which the buy-back was approved including information of number of shares acquired, the price and the date of acquisition;

(l) A confirmation that there are no defaults subsisting in repayment of deposits, interest payment thereon, redemption of debentures or payment of interest thereon or redemption of preference shares or payment of dividend due to any shareholder, or repayment of any term loans or interest payable thereon to any financial institution or banking company;

(m) A confirmation that the Board of Directors have made a full enquiry into the affairs and prospects of the company and that they have formed the opinion-
(i) That immediately following the date on which the general meeting is convened there shall be no grounds on which the company could be found unable to pay its debts;

(ii) The company's prospects for the year immediately following that date and its financial resources will be available to meet its liabilities as and when they fall due and shall not be rendered insolvent within a period one year from that date; and

(iii) The directors have taken into account the liabilities (including prospective and contingent liabilities), as if the company were being wound up under the provisions of the Companies Act, 2013

(n) A report addressed to the Board of Directors by the company’s auditors stating that–

(i) They have inquired into the company’s state of affairs;

(ii) The amount of the permissible capital payment for the securities in question is in their view properly determined;

(iii) That the audited accounts on the basis of which calculation with reference to buy-back is done not more than six months before from the date of offer document; and

(iv) The Board of Directors have to form the opinion as specified in clause (m) on reasonable grounds that the company, with regard to its state of affairs, shall not be rendered insolvent within a period of one year from that date.

2. File letter of offer with ROC in Form SH-8:

The company which has been authorized by a special resolution shall, before the buy-back of shares, file with the Registrar of Companies (ROC) a letter of offer in Form No. SH.8, along with the fee, provided that such letter of offer shall be dated and signed on behalf of the Board of directors of the company by not less than two directors of the company, one of whom shall be the managing director, if there is one.

3. File declaration of solvency in Form SH-9 along with Form SH-8:

The company shall file with the Registrar along with the letter of offer and in case of a listed company with the Registrar and the Securities and Exchange Board a declaration of solvency in Form No. SH.9 along with the fee, and signed by at least two directors of the company, one of whom shall be the managing director, if there is one, and verified it shall be by an affidavit as specified in the said Form.

4. Circulate among the shareholders in 20 days from filing with ROC:

The letter of offer shall be dispatched to the shareholders or security holders immediately after filing the same with the Registrar of Companies but not later than twenty days from its filing with the Registrar of Companies.

5. Offer period between 15-30 days from the date of circulation

The offer for buy-back shall remain open for a period of not less than fifteen days and not exceeding thirty days from the date of dispatch of the letter of offer.

6. Acceptance on proportionate basis:

In case the number of shares or other specified securities offered by the shareholders or security holders is more than the total number of shares or securities to be bought back by the company, the acceptance per shareholder shall be on proportionate basis out of the total shares offered for being bought back.
7. Verification by the company:
The company shall complete the verifications of the offers received within fifteen days from the date of closure of the offer and the shares or other securities lodged shall be deemed to be accepted unless a communication of rejection is made within twenty-one days from the date of closure of the offer.

8. Opening of separate bank account:
The company shall immediately after the date of closure of the offer, open a separate bank account and deposit therein, such sum, as would make up the entire sum due and payable as consideration for the shares tendered for buy-back in terms of these rules.

9. Make payment or return share certificates:
The company shall within seven days of the time specified in point 7-
   (a) make payment of consideration in cash to those shareholders or security holders whose securities have been accepted; or
   (b) return the share certificates to the shareholders or security holders whose securities have not been accepted at all, or the balance of securities in case of part acceptance

10. Other restrictions:
The company shall ensure that –
   (a) the letter of offer shall contain true, factual and material information and shall not contain any misleading information and must state that the directors of the company accept the responsibility for the information contained in such document;
   (b) the company shall not issue any new shares including by way of bonus shares from the date of passing of special resolution authorizing the buy-back till the date of the closure of the offer under these rules, except those arising out of any outstanding convertible instruments;
   (c) the company shall confirm in its offer the opening of a separate bank account adequately funded for this purpose and to pay the consideration only by way of cash;
   (d) the company shall not withdraw the offer once it has announced the offer to the shareholders;
   (e) the company shall not utilize any money borrowed from banks or financial institutions for the purpose of buying back its shares; and
   (f) the company shall not utilize the proceeds of an earlier issue of the same kind of shares or same kind of other specified securities for the buy-back.

11. Maintain register of buy-back in Form SH-10
   (a) The company shall maintain a register of shares or other securities which have been bought-back in Form No. SH.10.
   (b) The register of shares or securities bought-back shall be maintained at the registered office of the company and shall be kept in the custody of the secretary of the company or any other person authorized by the board in this behalf.
   (c) The entries in the register shall be authenticated by the secretary of the company or by any other person authorized by the Board for the purpose.
12. File return of buy-back in Form SH-11:

The company, after the completion of the buy-back under these rules, shall file with the Registrar, and in case of a listed company with the Registrar and the Securities and Exchange Board of India, a return in the Form No. SH.11 along with the fee.

13. File compliance certificate in Form SH-15 along with Form SH-11:

There shall be annexed to the return filed with the Registrar in Form No. SH.11, a certificate in Form No. SH.15 signed by two directors of the company including the managing director, if there is one, certifying that the buy-back of securities has been made in compliance with the provisions of the Act and the rules made thereunder.

Time Schedule Summary:

<table>
<thead>
<tr>
<th>Time Taken</th>
<th>Procedure</th>
</tr>
</thead>
</table>
| Starting Day say 'A' | Obtaining:  
• Auditors Report stating maximum amount permissible for buy-back;  
• Board of Directors Affidavit regarding solvency of company for one year;  
• Then holding Board meeting for considering proposal of buy-back, getting resolution passed and determine price for such buy-back. |
| A + 2 | Issue of notice with Explanatory Statement (along with disclosures mentioned below) to all members. |
| A + 23 | Holding EGM and passing special resolution, if required. |
| A + 24 | Obtaining Declaration of Solvency (verified by an affidavit in e-form SH9);  
• Filing draft letter of Offer with the ROC along with declaration of Solvency and e-form SH8;  
• Filing of e-form for registration of such resolution with MCA21. |
| A + 44 | Maximum time for dispatch of letter of offer to all members. |
| Within 15 days from the closure of offer | Verification of offer to be completed;  
**Note:** Offer for buy-back shall remain open to the members for a period not less than 15 days and not exceeding 30 days from the date of dispatch of letter of offer. The shares or other securities lodged shall be deemed to be accepted unless a communication of rejection is made within twenty-one days from the date of closure of the offer. |
| Immediately on Closure of offer | Open a Special Bank Account with Schedule Bank. |
| Within 7 days from completion of Verification | Making payment in cash to those shareholders whose offer has been accepted or return the share certificates to the shareholders forthwith. |
| Within 7 days from completion of Acceptance | Extinguish and physically destroy the share certificates of shares bought back. |
| After completion of buy-back | File requisite return in e-form SH 11 with MCA21 and a declaration signed by 2 directors, one of whom shall be Managing Director, if there is one, in e-form SH 15 |
Accounting Entries

1. In case investments are sold for buying back own shares
   Bank Dr.
   To Investment A/c

2. In case the proceeds of fresh issues are used for buy-back purpose
   Bank Dr.
   To debentures/other Investment A/c
   To Securities Premium A/c (if any)

3. For Buying back of shares:
   Equity Shareholders Dr.
   To Bank (With the amount paid)

4. For cancellation of shares bought back:
   Equity Share Capital A/c Dr. (with the nominal value of shares bought back)
   Free reserves/Securities Premium A/c Dr. (with the excess amount/premium paid over nominal value)
   To Equity Shareholders (with the amount payable)

5. In case the shares are bought back at discount:
   Equity Share Capital A/c Dr. (with the nominal value)
   To Equity Shareholders (with the amount paid)
   To Capital Reserves A/c (with the amount of discount on buy-back)

6. For transfer of nominal value of shares purchased out of free reserves/securities premium to Capital Redemption Reserves Account:
   Free Reserves Dr. (with the amount transferred)
   Securities Premium A/c Dr. (with the amount transferred)
   To Capital Redemption Reserves A/c (with the nominal value of shares bought back)

7. For expenses incurred in buy-back of shares:
   Buy-back Expenses Dr. (with the amount)
   To Bank

8. For transfer of buy-back expenses:
   Profit and Loss A/c Dr.
   To buy-back Expenses
Illustration 4:

**ALLUWALIA Ltd**

**BALANCE SHEET as at 31st March, 2017**

<table>
<thead>
<tr>
<th>I. EQUITIES AND LIABILITIES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Share Capital</td>
<td>1</td>
<td>10,00,000</td>
</tr>
<tr>
<td>(b) Reserve &amp; Surplus</td>
<td>2</td>
<td>7,05,000</td>
</tr>
<tr>
<td>2. Non-Current Liability</td>
<td>3</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Long-term borrowings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Current Liability</td>
<td></td>
<td>60,000</td>
</tr>
<tr>
<td>Trade payables</td>
<td></td>
<td>21,65,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. ASSETS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Fixed Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Tangible fixed assets</td>
<td>4</td>
<td>13,30,000</td>
</tr>
<tr>
<td>(b) Non-Current Investment</td>
<td></td>
<td>1,50,000</td>
</tr>
<tr>
<td>2. Current Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>1,00,000</td>
<td></td>
</tr>
<tr>
<td>Trade receivables</td>
<td>1,00,000</td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents Balance</td>
<td>4,85,000</td>
<td>6,85,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>21,65,000</td>
</tr>
</tbody>
</table>

**Notes**

1. Share Capital

Authorized Share Capital

Issued, Subscribed Called-Up and Paid-Up Share Capital:-

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,00,000 shares of Rs. 10 each fully paid-up</td>
<td>10,00,000</td>
</tr>
</tbody>
</table>

2. Reserve and Surplus

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Securities Premium</td>
<td>2,00,000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>5,05,000</td>
</tr>
<tr>
<td>3. Long-term borrowings</td>
<td></td>
</tr>
<tr>
<td>14% Debentures</td>
<td></td>
</tr>
<tr>
<td>4. Tangible Fixed assets</td>
<td></td>
</tr>
<tr>
<td>Land-building</td>
<td>9,30,000</td>
</tr>
<tr>
<td>Plant and machinery</td>
<td>3,50,000</td>
</tr>
<tr>
<td>Furniture and fitting</td>
<td>50,000</td>
</tr>
</tbody>
</table>

On 1st April, 2017 the shareholders of the company have approved the scheme of buy-back of equity shares as under:
(i) 5% of the equity shares would be bought back at Rs 15.

(ii) 12% Debentures to be issued for Rs 10,000 to finance for the buy-back, and balance from the General reserve may be utilized for this purpose.

(iii) Premium paid on buy-back of shares should be met from securities premium account.

(iv) Investments would be sold for Rs 275,000.

Pass journal entries to record the above transactions and prepare the balance sheet of the company immediately after the buy-back of shares.

**Solution:**

### Alluwalia Ltd.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr. (Rs)</th>
<th>Cr. (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Profit and Loss A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Sale of investments, the profit being transferred to profit and loss account as per shareholder’s special resolution)</td>
<td>275,000</td>
<td>150,000</td>
</tr>
<tr>
<td>125,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Purchase of 5,000 of own shares @ Rs 15 each)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Share Capital A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities Premium A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Shareholders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Cancellation of 5,000 equity shares bought back, and securities premium utilized as per shareholders’ special resolution)</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>25,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Reserve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Capital Redemption Reserve A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Transfer of general reserve utilized to the extent of nominal value of shares bought back)</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To 12% Debentures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Issue of 12% Debentures to partly finance the buy-back)</td>
<td>10,000</td>
<td></td>
</tr>
</tbody>
</table>
Alluwalia Ltd.

Balance Sheet (After Buy-back)
as at 1st April, 2017

I. EQUITIES AND LIABILITIES

1. Shareholders’ funds
   (a) Share Capital 950,000
   (b) Reserve & Surplus 805,000
2. Non-Current Liability Long-term borrowings 410,000
3. Current Liability Trade payables 60,000
TOTAL 22,25,000

II. ASSETS

1. Non-current assets
   (a) Fixed assets 13,30,000
   (i) Tangible fixed assets
2. Current Assets Stock 1,00,000
   Sundry debtors 1,00,000
   Cash and Cash equivalents 6,95,000
   TOTAL 22,25,000

Notes

1. Share Capital
   Authorized Share Capital 8,05,000
   Issued, Subscribed Called Up And
   Paid Up Share Capital
   95,000 shares of’ 10 each fully paid up
2. Reserve and Surplus 1,75,000
   Securities Premium 4,65,000
   General Reserve 40,000
   Capital Redemption Reserve Profit and
   Loss Account 125,000
3. Long-term borrowings
   14% Debentures – 400,000
   12%Debentures-10,000

Note: The debt-equity ratio of the company after buy-back of shares:
Debt-equity ratio = Debt/ Equity (Capital and free reserves)
= (410000 + 60000) / (950,000 + 175,000 + 465,000 + 125,000)
= 0.274 : 1
The debt equity ratio is within the limit.

**ISSUE OF BONUS SHARES**

**Issue & its related conditions**

A company may issue fully paid up bonus shares to its members, in any manner out of -

(i) its free reserves;
(ii) the securities premium account; or
(iii) the capital redemption reserve account.

However, no issue of bonus shares shall be made by capitalizing reserves created by the revaluation of assets.

No company shall capitalize its profits or reserves for the purpose of issuing fully paid up bonus shares under above, unless -

(a) it is authorized by its articles;
(b) it has, on the recommendation of the Board, been authorized in the general meeting of the company;
(c) it has not defaulted in payment of interest or principal in respect of fixed deposits or debt securities issued by it;
(d) it has not defaulted in respect of the payment of statutory dues of the employees, such as contribution to provident fund, gratuity and bonus;
(e) the partly paid up shares, if any outstanding on the date of allotment, are made fully paid up;
(f) The company which has once announced the decision of its Board recommending a bonus issue, shall not subsequently withdraw the same. [Rule 14 of Companies (Share Capital and Debentures) Rules, 2014]

(1) The bonus shares shall not be issued in lieu of dividend.

**Journal Entries for Issue of Bonus Shares**

(A) On capitalization of reserve for the issue of shares

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>Dr.</td>
</tr>
<tr>
<td>General Reserve A/c</td>
<td>Dr.</td>
</tr>
<tr>
<td>Capital Reserve A/c (realised in cash only)</td>
<td>Dr.</td>
</tr>
<tr>
<td>Securities Premium A/c</td>
<td>Dr.</td>
</tr>
<tr>
<td>Capital Redemption Reserve A/c</td>
<td>Dr.</td>
</tr>
<tr>
<td>To Bonus Shareholders A/c</td>
<td></td>
</tr>
</tbody>
</table>

(B) On issue of Bonus share

<table>
<thead>
<tr>
<th>Account</th>
<th>Debit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonus to Shareholders A/c</td>
<td>Dr.</td>
</tr>
<tr>
<td>To Share Capital A/c</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** If some shares are party paid up, first the shares are to be made fully paid up. Journal entries are as follows:
EMPLOYEE STOCK OPTION SCHEME (ESOP)

The idea that the employees should have an option to have an ownership stake in the company led to the emergence of concept of Employee Stock Option Plan (ESOP). The concept of ESOP is believed to be the brain child of Louis Kelso, a lawyer, economist and philosopher who persuaded a Senator from Louisiana to support legislation for legalizing ESOPs.

OBJECTIVE OF ISSUING ESOPS

• To provide an incentive to draw, retain and reward employees of the company;
• To motivate employees to contribute to the growth and profitability of the company.

IMPORTANT TERMS:

• ‘Option’ in stock options: Having an option in stock option gives the employees the choice to purchase the shares of the company on the fulfillment of the conditions mentioned in the ESOP plan at the price decided at the time of grant of options.
• Grant: The eligibility of a particular employee for the grant of stock options is based on his role and performance, hence grant of option.
• Vesting: Vesting has two components – Vesting percentage and vesting period
  Vesting period implies the period on the completion of which the said portion can be exercised. Vesting percentage refers to that portion of total options granted, which the employee will be eligible to exercise.
• Exercise: The activity of converting the options granted to an employee into shares by paying the required exercise price is known as the exercise of options.
• Exercise price and exercise period: Exercise price is the price which the employee has to pay to convert the options into shares. The exercise period is the time frame within which the employee can decide to exercise the stock options.
• Effective date of exercise: The effective date of exercise is the date on which the Company allots the shares.
Issue of Employee Stock Options by Unlisted Public Company as per provisions of Companies Act

As per Section 2(37) of the Companies Act, 2013 “employees’ stock option” means the option given to the directors, officers or employees of a company or of its holding company or subsidiary company or companies, if any, which gives such directors, officers or employees, the benefit or right to purchase, or to subscribe for, the shares of the company at a future date at a pre-determined price.

As per provisions of Sec 62(1)(b) of Companies Act, 2013, “where at any time a company having a share capital proposes to increase its subscribed capital by the issue of further shares, such shares shall be offered to employees under a scheme of employees’ stock option, subject to special resolution passed by the company and subject to such conditions as may be prescribed.”

Issue of Employee Stock Options

The above provision needs to be read with Rule 12 of The Companies (Share Capital and Debentures) Rules, 2014. As per the said Rule, a Company, other than a listed company, shall not offer shares to its employees under a scheme of employees’ stock option, unless it complies with the following requirements, namely:-

(1) **Sanction by Special Resolution:** The issue of Employees Stock Option Scheme has been approved by the shareholders of the company by passing a special resolution.

Employees to whom ESOPs may be issued: For the purpose of above statement the word “Employee” means -

(a) a permanent employee of the company who has been working in India or outside India; or
(b) a director of the company, but excluding an independent director; or
(c) an employee as defined in 1(a) or (b) above of a subsidiary, in India or outside India, or of a holding company of the company or of an associate company,

Excluding -

(i) an employee who is a promoter or a person belonging to the promoter group; or
(ii) a director who either himself or through his relatives or through anybody in corporate, directly or indirectly, holds more than ten percent of the outstanding equity shares of the company.

(2) **Disclosures in the explanatory statement annexed to the notice for passing of the resolution:**

The company shall make the following disclosures in the explanatory statement annexed to the notice for passing of the resolution -

(a) total number of stock options to be granted;
(b) identification of classes of employees entitled to participate in the ESOP;
(c) the appraisal process for determining the eligibility of employees to participation the ESOP;
(d) the requirements of vesting and the period of vesting;
(e) the maximum period within which the options shall be vested;
(f) the exercise price or the formula for arriving at the same;
(g) the exercise period and process of exercise;
(h) the lock-in period, if any;
(i) the maximum number of options to be granted per employee and in aggregate;
(j) The method which the company shall use to value its options;

(k) the conditions under which option vested in employees may lapse, e.g., in case of termination of employment for misconduct;

(l) the specified time period within which the employee shall exercise the vested options in the event of a proposed termination of employment or resignation of employee; and

(m) a statement to the effect that the company shall comply with the applicable accounting standards.

(3) **Pricing**: The companies granting option to its employees pursuant to Employees Stock Option Scheme will have the freedom to determine the exercise price in conformity with the applicable accounting policies, if any.

(4) **Shareholders’ approval by way of separate resolution**: The approval of shareholders by way of separate resolution shall be obtained by the company in case of-

(a) grant of option to employees of subsidiary or holding company; or

(b) grant of option to identified employees, during any one year, equal to or exceeding one percent of the issued capital of the company at the time of grant of option.

(5) (a) The company may by special resolution, vary the terms of ESOP not yet exercised by the employees

(b) The notice for passing special resolution for variation of terms of ESOP shall disclose full details of the variation, the rationale therefore, and the details of the employees who are beneficiaries of such variation.

(6) **Minimum vesting period**: 

(a) There shall be a minimum period of one year between the grant of options and vesting of option. However, in a case where options are granted by a company under its Employees Stock Option Scheme in lieu of options held by the same person under an Employees Stock Option Scheme in another company, which has merged or amalgamated with the first mentioned company, the period during which the options granted by the merging or amalgamating company were held by him shall be adjusted against the minimum vesting period required (i.e., 1 year)

(b) Lock-in-period for shares issued on exercise of option: The company shall have the freedom to specify the lock-in period for the shares issued in pursuant to exercise of option.

(c) **Right to receive dividends**: The Employees shall not have right to receive any dividend or to vote or in any manner enjoy the benefits of a shareholder in respect of option granted to them, till shares are issued on exercise of option.

(7) **Forfeiture/ Refund of amount paid by employees under ESOP**: The amount, payable by the employees, at the time of grant of option -

(a) may be forfeited by the company if the option is not exercised by the employees within the exercise period; or

(b) the amount may be refunded to the employees if the options are not vested due to non-fulfillment of conditions relating to vesting of option as per the Employees Stock Option Scheme.

(8) (a) The option granted to employees shall not be transferable.

(b) The option granted to the employees shall not be pledged, hypothecated, mortgaged or otherwise encumbered or alienated in any other manner.

(c) Subject to clause (d), no person other than the employees to whom the option has been granted shall be entitled to exercise the option.
(d) In the event of the death of the employee while in employment, all the options granted to him till such date shall vest in the legal heirs or nominees of the deceased employee.

(e) In case the employee suffers a permanent incapacity while in employment, all the options granted to him as on the date of permanent incapacitation, shall vest in him on that day.

(f) In the event of resignation or termination of employment, all options not vested in the employee as on that day shall expire. However, the employee can exercise the options granted to him which were vested within the period specified in this behalf, subject to the terms and conditions under the scheme granting such options as approved by the Board.

9. Disclosures in Board of Directors Report: The Board of Directors, shall, inter alia, disclose in the Directors’ Report for the year, the following details of the Employees Stock Option Scheme: (a) options granted; (b) options vested; (c) options exercised; (d) the total number of shares arising as a result of exercise of option; (e) options lapsed; (f) the exercise price; (g) variation of terms of options; (h) money realized by exercise of options; (i) total number of options in force; (j) employeewise details of options granted to:- (i) key managerial personnel; (ii) any other employee who receives a grant of options in any one year of option amounting to five percent or more of options granted during that year. (iii) identified employees who were granted option, during any one year, equal to or exceeding one percent of the issued capital (excluding outstanding warrants and conversions) of the company at the time of grant;

10. Register of Employees Stock Options:

(i) The company shall maintain a Register of Employee Stock Options in Form No. SH.6 and shall forthwith enter therein the particulars of option granted under clause (b) of sub-section (1) of section 62.

(ii) The Register of Employee Stock Options shall be maintained at the registered office of the company or such other place as the Board may decide.

(iii) The entries in the register shall be authenticated by the company secretary of the company or by any other person authorized by the Board for the purpose.

Rule 12(11) specifically provides that, where the equity shares of the company are listed on a recognized stock exchange, the Employees Stock Option Scheme shall be issued in accordance with the regulations made by Securities and Exchange Board of India. In this behalf, SEBI (Share Based Employee Benefits) Regulations, 2014 issued in October 28, 2014 (applicable from the even date) have replaced the erstwhile SEBI Employee Stock Option Scheme and Employee Stock Purchase Scheme Guidelines (applicable for listed companies) 1999.

Illustration 5:

Raman Ltd. granted 1000 options on April 01, 2014 at Rs. 40 (nominal value Rs. 10 each) when the market price was Rs. 120, and the vesting period was 2.5 years. The maximum exercise period was one year. On Oct 1, 2016, 200 unvested options lapsed and 600 options were exercised. On 30th Oct, 2017 remaining 200 options lapsed at the end of exercise period.

Pass necessary journal entries.
Solution:

In the Books of Raman Ltd.

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 April 1</td>
<td>Deferred Employee Compensation Expense A/c Dr.</td>
<td>80,000</td>
</tr>
<tr>
<td></td>
<td>To Employee Stock Options Outstanding A/c (Being grant of 1,000 options at a discount of Rs. 80, i.e., Rs. 120 - Rs. 40)</td>
<td>80,000</td>
</tr>
<tr>
<td>2015 March 31</td>
<td>Employee Compensation Expense A/c Dr.</td>
<td>32,000</td>
</tr>
<tr>
<td></td>
<td>To Deferred Employee Compensation Expense A/c (Being amortization of Deferred Compensation, i.e., Rs. 80,000 / 2.5)</td>
<td>32,000</td>
</tr>
<tr>
<td>2016 March 31</td>
<td>Employee Compensation Expense A/c Dr.</td>
<td>32,000</td>
</tr>
<tr>
<td></td>
<td>To Deferred Employee Compensation Expense A/c (Being amortization of Deferred Compensation, i.e., Rs. 80,000 / 2.5)</td>
<td>32,000</td>
</tr>
<tr>
<td>2016 Oct 1</td>
<td>Employee Stock Options Outstanding A/c Dr.</td>
<td>16,000</td>
</tr>
<tr>
<td></td>
<td>[(200 * Rs.80) * 2/2.5]</td>
<td>12,800</td>
</tr>
<tr>
<td></td>
<td>To Deferred Employee Compensation Expense A/c (Being reversal of compensation accounting on lapse of 200 unvested options)</td>
<td>3,200</td>
</tr>
<tr>
<td>2016 Oct 1</td>
<td>Employee Compensation Expense A/c Dr.</td>
<td>12,800</td>
</tr>
<tr>
<td></td>
<td>To Deferred Employee Compensation Expense A/c (Being amortization of Deferred Compensation) (800<em>80</em>0.5/2.5)</td>
<td>12,800</td>
</tr>
<tr>
<td>2016 Oct 1</td>
<td>Bank A/c Dr. (600 *40)</td>
<td>24,000</td>
</tr>
<tr>
<td></td>
<td>Employee Stock Options Outstanding A/c [Rs. 600 * (Rs. 120 - Rs. 40)]</td>
<td>48,000</td>
</tr>
<tr>
<td></td>
<td>To Equity Share Capital A/c (600 * 10)</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>To Securities Premium A/c [Rs.600 *(Rs. 120 - Rs. 10)]</td>
<td>66,000</td>
</tr>
<tr>
<td></td>
<td>(Being excise of 600 options at an excise price of Rs. 20 each and an accounting value of Rs. 60 each )</td>
<td></td>
</tr>
<tr>
<td>2017 Oct. 30</td>
<td>Employee Stock Options Outstanding A/c Dr.</td>
<td>16,000</td>
</tr>
<tr>
<td></td>
<td>To Employee Compensation Expense A/c (Being reversal of compensation accounting on lapse of 200 vested options at the end of the excise period i.e., Rs.200 * 80 )</td>
<td>16,000</td>
</tr>
</tbody>
</table>
ISSUE OF SWEAT EQUITY SHARES

Introduction: Sweat equity shares refer to equity shares which are given to the company’s employees on favourable terms, in recognition of their work. Sweat equity shares are one of the modes of making share-based payments to employees. Sweat equity shares rewards the beneficiaries by giving them incentives in lieu of their contribution towards development of the company. Further, sweat equity shares facilitate greater employee stakes as well as interest in company’s growth and encourages employees to add more value towards the company.

Definition

(1) Sweat Equity Shares: As per Section 2(88) of the Companies Act, 2013 “sweat equity shares” means such equity shares as are issued by a company to its directors or employees at a discount or for consideration, other than cash, for providing their know-how or making available rights in the nature of intellectual property rights or value additions, by whatever name called;

Conditions to be fulfilled

(1) Not less than one year has, at the date of such issue, elapsed since the date on which the company had commenced business;

(2) The issue is authorized by a special resolution passed by the company;

(3) The resolution specifies the number of shares, the current market price, consideration, if any, and the class or classes of directors or employees to whom such equity shares are to be issued;

(4) The special resolution authorizing the issue of sweat equity shares shall be valid for making the allotment within a period of not more than twelve months from the date of passing of the special resolution.

(5) The sweat equity shares issued to directors or employees shall be locked in/non-transferable for a period of three years from the date of allotment and the fact that the share certificates are under lock-in and the period of expiry of lock-in shall be stamped in bold or mentioned in any other prominent manner on the share certificate.

(6) Where the equity shares of the company are listed on a recognized stock exchange, the sweat equity shares are issued in accordance with the regulations made by the Securities and Exchange Board in this behalf and if they are not so listed, the sweat equity shares are issued in accordance with the Companies (Share Capital and Debentures) Rules, 2014.

Quantum of sweat equity share

The company shall not issue sweat equity shares for more than fifteen percent of the existing paid up equity share capital in a year or shares of the issue value of rupees five crores, whichever is higher.

Provided that the issuance of sweat equity shares in the company shall not exceed twenty five percent, of the paid up equity capital of the company at any time.

Provided further that a startup company, as defined in notification number GSR 180(E) dated 17th February, 2016 issued by the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India, may issue sweat equity shares not exceeding fifty percent of its paid up capital upto five years from the date of its incorporation or registration.

Pricing of sweat equity share

(1) The sweat equity shares to be issued shall be valued at a price determined by a registered valuer as the fair price giving justification for such valuation.

(2) The valuation of intellectual property rights or of know how or value additions for which sweat equity shares
are to be issued, shall be carried out by a registered valuer, who shall provide a proper report addressed to the Board of Directors with justification for such valuation.

(3) A copy of gist along with critical elements of the valuation report obtained under clause (1) and clause (2) shall be sent to the shareholders with the notice of the general meeting.

**Procedure for issue of sweat equity share**

For issue to sweat equity shares, the following broad procedure needs to be followed:

1. Convene and hold a board meeting to consider the proposal of issue of sweat equity shares and to fix up the date, time, place and agenda for general meeting and to pass a special resolution for the same.

2. Issue notices in writing to shareholders for general meeting alongwith explanatory statement. The explanatory statement to be annexed to the notice for the general meeting pursuant to section 102 of the Act must contain the following particulars:
   - (a) the date of the Board meeting at which the proposal for issue of sweat equity shares was approved;
   - (b) the reasons or justification for the issue;
   - (c) the class of shares under which sweat equity shares are intended to be issued;
   - (d) the total number of shares to be issued as sweat equity;
   - (e) the class or classes of directors or employees to whom such equity shares are to be issued;
   - (f) the principal terms and conditions on which sweat equity shares are to be issued, including basis of valuation;
   - (g) the time period of association of such person with the company;
   - (h) the names of the directors or employees to whom the sweat equity shares will be issued and their relationship with the promoter or Key Managerial Personnel;
   - (i) the price at which the sweat equity shares are proposed to be issued;
   - (j) the consideration including consideration other than cash, if any to be received for the sweat equity;
   - (k) the ceiling on managerial remuneration, if any, be breached by issuance of such sweat equity and how it is proposed to be dealt with;
   - (l) a statement to the effect that the company shall conform to the applicable accounting standards; and
   - (m) diluted Earnings per Share pursuant to the issue of sweat equity shares are calculated in accordance with the applicable accounting standards.

3. Convene the General Meeting and Pass a special resolution;

4. File the resolution with MCA in Form No. MGT-14 within 30 days of passing the same;

5. Call a Board meeting and allot sweat equity shares in the meeting;

6. File Form No. PAS-3 within 30 days of passing of the Board resolution for allotting sweat equity shares;

7. The company shall maintain a Register of Sweat Equity Shares in Form No. SH-3 and shall forthwith enter therein the particulars of Sweat Equity Shares issued.

8. The Register of Sweat Equity Shares shall be maintained at the registered office of the company or such other place as the Board may decide.
(9) The entries in the register shall be authenticated by the Company Secretary of the company or by any other person authorized by the Board for the purpose.

Disclosure in the directors’ report in respect of sweat equity share

The Board of Directors shall, inter alia, disclose in the Directors’ Report for the year in which such shares are issued. The following are the details about the issue of sweat equity shares namely:

(1) the class of director or employee to whom sweat equity shares were issued;
(2) the class of shares issued as Sweat Equity Shares;
(3) the number of sweat equity shares issued to the directors, key managerial personnel or other employees showing separately the number of such shares issued to them, if any, for consideration other than cash and the individual names of allottees holding one percent or more of the issued share capital;
(4) the reasons or justification for the issue;
(5) the principal terms and conditions for the issue of sweat equity shares, including pricing formula;
(6) the total number of shares arising as a result of issuing of sweat equity shares; the percentage of the sweat equity shares of the total post issued and paid up share capital;
(8) the consideration (including consideration other than cash) received or benefit accrued to the company from the issue of sweat equity shares;
(9) the diluted Earnings Per Share (EPS) pursuant to issuance of sweat equity shares.

Accounting treatment of sweat equity share issued

(1) Where sweat equity shares are issued for a non-cash consideration on the basis of a valuation report in respect thereof obtained from the registered valuer, such non-cash consideration shall be treated in the following manner in the books of account of the company

(a) where the non-cash consideration takes the form of a depreciable or amortizable asset, it shall be carried to the balance sheet of the company in accordance with the accounting standards; or
(b) where clause (a) is not applicable, it shall be expensed as provided in the accounting standards.

(2) The amount of sweat equity shares issued shall be treated as part of managerial remuneration for the purposes of sections 197 and 198 of the Act, if the following conditions are fulfilled, namely.-

(i) the sweat equity shares are issued to any director or manager; and
(ii) they are issued for consideration other than cash, which does not take the form of an asset which can be carried to the balance sheet of the company in accordance with the applicable accounting standards.

(3) In respect of sweat equity shares issued during an accounting period, the accounting value of sweat equity shares shall be treated as a form of compensation to the employee or the director in the financial statements of the company, if the sweat equity shares are not issued as pursuant to the acquisition of an asset.

(4) If the shares are issued as pursuant to the acquisition of an asset, the value of the asset, as determined by the valuation report, shall be carried in the balance sheet as per the Accounting Standards, and such amount of the accounting value of the sweat equity shares that is in excess of the value of the asset acquired, as per the valuation report, shall be treated as a form of compensation to the employee or the director in the financial statements of the company.

Explanation.- For the purposes of this subrule, it is hereby clarified that the accounting value shall be the fair
value of the sweat equity shares as determined by a registered valuer under Rule 8(6) of the Companies (Share Capital and Debentures) Rules, 2014.

ISSUE OF RIGHT SHARES

**Meaning:** Right issue means offering shares to existing members in proportion to their existing shareholding

1. Where at any time, a company having a share capital proposes to increase its subscribed capital by the issuing further shares, such shares shall be offered –
   
   a. to persons who, at the date of the offer, are holders of equity shares of the company in proportion, as nearly as circumstances admit, to the paid up share capital on those shares by sending a letter of offer subject to the following conditions, namely: -
      
      i. the offer shall be made by notice specifying the number of shares offered and limiting a time not being less than fifteen days and not exceeding thirty days from the date of the offer within which the offer, if not accepted, shall be deemed to have been declined;
      
      ii. unless the articles of the company otherwise provide, the offer aforesaid shall be deemed to include a right exercisable by the person concerned to renounce the shares offered to him or any of them in favour of any other person; and the notice referred to in clause (i) shall contain a statement about this right;
      
      iii. after the expiry of the time specified in the notice aforesaid, or on receipt of earlier intimation from the person to whom such notice was given and he declined to accept the shares offered, the Board of Directors may dispose of them in such manner which is not disadvantageous to the shareholders and company;

   b. to employees under a scheme of employees’ stock option, subject to special resolution passed by company and subject to such conditions as may be prescribed; or

   c. to any persons, if it is authorized by a special resolution, whether or not those persons include the persons referred to in clause (a) or clause (b), either for cash or for a consideration other than cash, if the price of such shares is determined by the valuation report of a registered valuer subject to such conditions as may be prescribed.

2. The notice referred to in sub-clause (i) of clause (a) of sub-section (1) shall be despatched through registered post or speed post or through electronic mode to all the existing shareholders at least three days before the opening of the issue.

3. Nothing in this section shall apply to the increase of the subscribed capital of a company caused by the exercise of an option as a term attached to the debentures issued or loan raised by the company to convert such debentures or loans into shares in the company:

Provided that the terms of issue of such debentures or loans containing such an option have been approved before the issue of such debentures or the raising of loans by a special resolution passed by the company in the general body meeting.

ISSUE AND REDEMPTION OF PREFERENCE SHARES

**Issue of preference shares**

A company which is limited by shares, if the articles so authorize, can issue preference shares liable to be redeemed within a period not exceeding twenty years from the date of their issue under section 55 of the Companies Act, 2013. No company limited by shares shall issue any irredeemable preference shares.

A company may issue preference shares for a period exceeding 20 years but not beyond 30 years for infrastructure projects (Specified in Schedule VI).
However, the redemption is subject to minimum 10% of such preference shares per year from the twenty-first year onwards or earlier, on proportionate basis, at the option of the preference shareholders.

**Redemption of preference shares**

The preference shares can be redeemed only when they are fully paid up -

- out of the profits of the company which would otherwise be available for dividend, or
- out of the proceeds of a fresh issue of shares made for the purposes of such redemption.

**CAPITAL REDEMPTION RESERVE ACCOUNT**

If preference shares are to be redeemed out of the profits of a company, a sum equal to nominal amount of shares that are to be redeemed, shall be transferred to a reserve called Capital Redemption Reserve Account out of profits of the company and provisions of this Act relating to reduction of share capital of a company shall apply as if the Capital Redemption Reserve Account were paid up share capital of the company.

The capital redemption reserve account may be used by the company, in paying up of unissued shares of the company to be issued to members of the company as fully paid bonus shares.

**Premium on redemption of preference shares**

(a) For the companies whose financial statements comply with the accounting standards as prescribed in section 133, the premium payable on redemption shall be provided out of the profits of the company, before the shares are redeemed.

(b) For redemption of any preference shares issued on or before the commencement of Companies Act, 2013, the premium payable on redemption shall be provided out of the profits of the company, or out of the company’s securities premium account, before such shares are redeemed.

(c) For companies whose financial statements need not comply with the accounting standards as under section 133, the premium payable on redemption shall be provided out of the profits of the company, or out of the company’s securities premium account, before such shares are redeemed.

**Case 1:** Redemption of preference shares out of the profits of the company which would otherwise be available for dividend.

In case redeemable preference shares are redeemed out of company profits, which are otherwise available for dividend, the “Capital Redemption Reserve Account” is to be created that will represent the redeemable preference shares in the balance sheet after redemption. This capital redemption reserve should be equivalent to the amount of Preference Shares which are to be redeemed. The profits available for dividend have to be transferred to Capital Redemption Reserve Account.

**Journal Entries**

1. Transfer profits available for dividend to Capital Redemption Reserve Account:
   - General Reserve Account Dr. as the case may be
   - Profit and Loss Appropriation A/c Dr.
   - Dividend Equalization Account Dr.
   - To Capital Redemption Reserve A/c with the nominal value of the shares to be redeemed

2. If current assets are realized to provide cash for redemption of preference shares:
   - Bank Dr.
   - To Respective Assets Account with the realized value of assets
3. On transfer of redeemable preference share-capital to be redeemed to Preference Shareholders Account:
   
   Redeemable Preference Share-Capital A/c Dr. with the nominal value of the shares to be redeemed
   To Preference Shareholders A/c

4. If preference shares are redeemed at a premium:
   
   Redeemable Preference Share-Capital A/c Dr.
   Premium on Redemption of Preference Shares A/c Dr. with the amount of premium payable
   To Preference Shareholders A/c

5. For providing premium on redemption of preference shares:
   
   Securities Premium Account Dr. with amount of premium paid on redemption
   or Profit and Loss Appropriation A/c Dr.
   To Premium on Redemption of Preference Shares Account

6. On redemption of preference shares:
   
   Preference Shareholders Account Dr. with the amount paid
   To Bank

Illustration 6:

Hello Ltd. had an issue of 2,000, 10% Redeemable Preference Shares of Rs 100 each, repayable at a premium of 10%. These shares are to be redeemed out of the accumulated reserves, which are more than the necessary sum required for redemption. Show the necessary entries in the books of the company, assuming that the premium on redemption of shares has to be written off against the company’s Securities Premium Reserves.

Solution:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr. (Rs)</th>
<th>Cr. (Rs)</th>
</tr>
</thead>
<tbody>
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<td>General Reserve Account</td>
<td>Dr.</td>
<td>2,00,000</td>
</tr>
<tr>
<td>To Capital Redemption Reserve A/c</td>
<td></td>
<td>2,00,000</td>
</tr>
<tr>
<td>(Transfer of reserves to Capital Redemption Reserve Account on Redemption of Redeemable Preference Shares)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% Redeemable Preference Share Capital A/c</td>
<td>Dr.</td>
<td>2,00,000</td>
</tr>
<tr>
<td>Premium on Redemption of Preference Shares A/c</td>
<td>Dr.</td>
<td>20,000</td>
</tr>
<tr>
<td>To 12% Preference Shareholders A/c</td>
<td></td>
<td>2,20,000</td>
</tr>
<tr>
<td>(Amount payable to 10% preference shareholders on redemption of 10% preference shares at a premium of 10%)</td>
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</table>
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<table>
<thead>
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<th>Securities Premium Reserves</th>
<th>Dr. 20,000</th>
<th>Cr. 20,000</th>
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<tbody>
<tr>
<td>To Premium on Redemption of Preference Share A/c</td>
<td>(Application of Securities Premium Account to write off premium on Redemption of Preference Shares)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10% Preference Shareholders A/c</th>
<th>Dr. 2,20,000</th>
<th>Cr. 2,20,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Bank</td>
<td>(Amount due to 10% preference shareholders on redemption paid)</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Capital Redemption Reserve Account replaces the 10% Redeemable Preference Shares Capital Account and the capital structure of the company remains unchanged.

**Case 2:** If the redeemable preference shares are redeemed out of the proceeds of a fresh issue of shares made for the purpose of redemption:

In a case where redeemable preference shares are redeemed out of proceeds received from fresh issue of shares, the Share Capital Account raised by fresh issue shall take the place of Redeemable Preference Share Capital Account after redemption. Thus, in such a case, new Share Capital Account (Equity or Preference) must be equal to the redeemable preference shares redeemed.

First of all, entries for fresh issue of shares will be passed. Then entries for redemption passed as has been given in the previous case.

**Illustration 7:**

Diamond Ltd. has part of its share capital consisting of 20000, 12% Redeemable Preference Shares of Rs 100 each, repayable at a premium of 10%. The shares have now become ready for redemption. It is decided that the whole amount will be redeemed out of a fresh issue of 20,000 equity shares of Rs 10 each at Rs 15 each. The whole amount is received in cash and the 12% preference shares are redeemed for the relevant portion.

Show the necessary journal entries in the books of the company.

**Solution:**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr. (Rs)</th>
<th>Cr. (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>Dr. 3,00,000</td>
<td>3,00,000</td>
</tr>
<tr>
<td>To Equity Share Application and Allotment A/c</td>
<td>(Application money on 20,000 equity shares @ Rs 15 per share including a premium of Rs 5 per share)</td>
<td></td>
</tr>
<tr>
<td>Equity Share Application and Allotment A/c</td>
<td>Dr. 3,00,000</td>
<td>200,000</td>
</tr>
<tr>
<td>To Equity Share Capital A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Securities Premium Reserves</td>
<td>(Allotment of 20,000 equity shares Rs 10 each issued at a premium of 5 per share as per Board's Resolution dated....)</td>
<td>100,000</td>
</tr>
</tbody>
</table>
12% Redeemable Preference Share Capital A/c  
Premium on Redemption of Preference Share A/c  
To 12% Preference Shareholders A/c  
(Amount due to 12% preference shareholders on redemption of 8% preference shares at a premium of 5%)

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>12% Preference Shareholders A/c</td>
<td>2,00,000</td>
<td></td>
</tr>
<tr>
<td>Premium on Redemption of Preference Share A/c</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Securities Premium Reserves</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>To 12% Preference Shareholders A/c</td>
<td>2,10,000</td>
<td></td>
</tr>
</tbody>
</table>

**Case 3:** If the redeemable preference shares are redeemed partly out of the profits of the company which would otherwise be available for dividend and partly out of the proceeds of a fresh issue of shares made for the purpose of redemption:

In such a case, the Capital Redemption Reserve Account and the new Share Capital Account taken together will replace the Redeemable Preference Share Capital redeemed.

Thus, Redeemable Preference Share Capital redeemed = Capital Redemption Reserve Account + New Share Capital Account (Equity or Preference).

Here, all the entries shown under Case (i) and Case (ii) have to be passed. But there are certain common entries which can be combined together.

**Illustration 8**

**Jumpers Ltd**

**Balance Sheet as at 31st March, 2017**

<table>
<thead>
<tr>
<th>I. EQUITY AND LIABILITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
</tr>
<tr>
<td>(a) Share Capital</td>
<td>1</td>
</tr>
<tr>
<td>(b) Reserve &amp; Surplus</td>
<td>2</td>
</tr>
<tr>
<td>2. Current Liabilities</td>
<td></td>
</tr>
<tr>
<td>Trade Payable</td>
<td>23,700</td>
</tr>
<tr>
<td>Short-term provisions</td>
<td>38,500</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,76,200</td>
</tr>
</tbody>
</table>
II. ASSETS

1. Non-current assets
   (a) Fixed Assets
   I. Tangible fixed assets 2,25,000

(b) Non-Current Investments

2. Current Assets
   Inventories 1,30,500
   Trade receivable 49,550
   Cash and cash equivalents 9,950
   Other current assets 1,200 1,91,200
   TOTAL 4,76,200

Notes

1. Share capital
   Authorized Share Capital
   40,000 equity shares of Rs 10 each fully paid up 4,00,000
   1000, 8% preference shares of Rs 100 each 1,00,000
   5,00,000

   Issued, Subscribed Called Up And Paid up Share Capital
   1000 10% Preference shares of 100 each fully paid up 1,00,000
   25,000 equity shares of Rs 10 each fully paid up 2,50,000
   3,50,000

2. Reserve and Surplus
   Securities Premium Reserves 9,000
   Surplus Account 55,000
   64,000

In order to redeem its preference shares, the company issued 5,000 equity shares of 10 each at a Premium of 10% and sold its investment of 70,800. Preference shares were redeemed at a premium of 10%.

Show the necessary journal entries in the books of the company.

Solution:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr.(Rs)</th>
<th>Cr.(Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>Dr. 55,000</td>
<td></td>
</tr>
<tr>
<td>To Equity Share Application and Allotment A/c</td>
<td></td>
<td>55,000</td>
</tr>
<tr>
<td>(Application money received on 5,000 equity shares of Rs. 10 at a premium of 10%).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account</td>
<td>Dr.</td>
<td>Credit</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>Equity Share Application and Allotment A/c</td>
<td>55,000</td>
<td></td>
</tr>
<tr>
<td>To Equity Share Capital A/c</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>To Securities Premium Reserves</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>(Allotment of 5000 equity shares of Rs. 10 each issued at a premium of 10% as per Board’s resolution dated....)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surplus A/c</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>To Capital Redemption Reserve A/c</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>(Transfer of the balance amount of the nominal value preference shares to be redeemed not covered by fresh issue, i.e., Rs 1,00,000 - 50,000 on redemption to Capital Redemption Reserve A/c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td>70,800</td>
<td></td>
</tr>
<tr>
<td>To Investments A/c</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>To Surplus A/c</td>
<td>10,800</td>
<td></td>
</tr>
<tr>
<td>(Sale on Investments at a profit and transfer of profit on sale to Profit and Loss A/c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% Redeemable Preference Share Capital A/c Dr.</td>
<td>1,00,000</td>
<td></td>
</tr>
<tr>
<td>Premium on Redemption of Preference Shares A/c Dr.</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>To 10% Preference Shareholders A/c</td>
<td>1,10,000</td>
<td></td>
</tr>
<tr>
<td>(Amount due to 8% preference shareholders on redemption)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Securities Premium Reserves</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>To Premium on Redemption of Preference Shares A/c</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>(Application of securities premium to write off premium on redemption of preference shares)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10% Preference Shareholders A/c Dr.</td>
<td>1,10,000</td>
<td></td>
</tr>
<tr>
<td>To Bank</td>
<td>1,10,000</td>
<td></td>
</tr>
<tr>
<td>(Amount due to 10% Preference Shareholders on redemption paid)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** In the above example, the capital structure of the company remains unchanged, as seen by fact - the Equity Share Capital is issued at Rs 50,000 and Capital Redemption Reserve is at Rs 50,000, which jointly replaces 10% Redeemable Preference Share Capital Rs 1,00,000.

**UNDERWRITING OF SHARES**

1. Underwriting is a process which refers to a definite and unambiguous assurance by underwriter(s) to take up a fixed number of shares/ debentures of a company irrespective of shares or debentures subscribed for by public. In such cases, underwriters are committed to subscribe to pre-agreed number of shares or debentures, along with unsubscribed shares or debentures, if any. Even if issue of shares is over-subscribed, underwriters are liable to take up the decided number of shares of debentures.

2. **Underwriters and Brokers:**

Brokers merely promise to attempt to secure subscriptions of shares or debentures issued. However, they are
Brokers only procure subscriptions for shares/debentures from public on company's behalf. The remuneration they get for their service rendered to the company is known as brokerage.

Underwriters are the individuals or institutions underwriting a public issue of shares or debentures. The underwriters may be individuals, partnership firms or joint stock companies. Some specialized financial institutions set up by the Government in the public sector also play an active role in underwriting shares or debentures.

3. Types of Underwriting

Two kinds of underwriting agreement are given below:

(a) Complete Underwriting

In case of complete underwriting, the whole issue of shares or debentures is underwritten. It may be underwritten by a single firm or institution, agreeing to take the complete risk. It can also be done by multiple firms or institutions together, each agreeing to take risk only to a limited extent.

(b) Partial Underwriting

In cases where only a part of shares or debentures issue of a company is underwritten, it is said to be partial underwriting.

4. Underwriting Commission

It is the consideration which is payable to underwriters for underwriting an issue of shares/debentures of a company. Underwriting commission is paid at a specified rate on the issue price of the whole of the shares or debentures underwritten, whether the underwriters are called upon to take up any shares or debentures not. In totality, the risk borne by the underwriters, bears them the fruit of commission. Underwriting commission may also be along with a brokerage amount.

5. Payment of Underwriting Commission

Section 40(6) of the Companies Act 2013, provides that a company may pay commission to any person in connection with the subscription or procurement of subscription to its securities, whether absolute or conditional, subject to the following conditions which are prescribed under Companies (Prospectus and Allotment of Securities) Rules, 2014:

(a) the payment of such commission shall be authorized in the company’s articles of association;

(b) the commission may be paid out of proceeds of the issue or the profit of the company or both;

(c) the rate of commission paid or agreed to be paid shall not exceed, in case of shares, five percent (5%) of the price at which the shares are issued or a rate authorized by the articles, whichever is less, and in case of debentures, it shall not exceed two and a half per cent (2.5%) of the price at which the debentures are issued, or as specified in the company’s articles, whichever is less;

(d) the prospectus of the company shall disclose -

   - the name of the underwriters;
   - the rate and amount of the commission payable to the underwriter; and
   - the number of securities which is to be underwritten or subscribed by the underwriter absolutely or conditionally.

(e) there shall not be paid commission to any underwriter on securities which are not offered to the public for subscription;

(f) a copy of the contract for the payment of commission is delivered to the Registrar at the time of delivery of the prospectus for registration.
Thus, the underwriting commission is limited to 5% of issue price in case of shares, and 2.5% in case of debentures. The rates of commission given above are the maximum rates, and if the company negotiates with the underwriter, it may pay lower rates also.

**Marked and Unmarked Applications**

When shares/debentures issue of a company is underwritten by two or more persons, the applications for shares/debentures sent through underwriters should bear a stamp of the respective underwriters. If it is not done, it would be very difficult for the company to determine the number of applications from each underwriter and in turn it will become an issue in determining the liability of each of the underwriters. Hence, “Marked Applications” are the ones bearing stamp of respective underwriters, while the applications received directly by the company, and which do not bear the stamp of underwriters are known as “Unmarked Applications”.

If the entire share/debenture issue is underwritten by a single underwriter, marking of applications becomes immaterial since he is to get paid for all the applications. Whether sent through him or received directly while determining his liability. When the shares/debentures issue is underwritten by more than one underwriter, the risk is distributed among all underwriters in a pre-agreed ratio.

6. **Determining the Liability of Underwriters**

An underwriter’s liability can be determined in the following ways:

In case of Complete Underwriting:

(a) *In case of a single underwriter*: The underwriter will be liable to take up all the shares or debentures that have not been subscribed for by the public. In such a case, it is not material to know how many applications are sent through him and how many applications are received directly by the company. Thus, the liability of the underwriter in such a case will be as follows:

\[
\text{Liability} = \text{Shares or debentures offered} - \text{Total applications received}.
\]

If shares/debentures are oversubscribed or fully subscribed by the public, the underwriter is free from his liability and is not liable to take up any shares or debentures of the company. However, he will be entitled to get the commission which is due to him on the total issue price of the shares or debentures.

(b) In case issue is underwritten by a number of underwriters in an agreed ratio the liability of the respective underwriters can be determined as under:

Gross liability of every individual underwriter in agreed ratio would first be reduced by marked applications and then credit may be given in respect of unmarked applications, sent directly to the company by way of deduction from the balance left in the ratio of their gross liability. The liability of each underwriter in such a case will be:

\[
\begin{align*}
\text{Gross liability according to the agreed ratio} & \quad \ldots \\
\text{Less: Marked applications} & \quad \ldots \\
\text{Balance left} & \quad \ldots \\
\text{Less: Unmarked applications in the ratio of gross liability} & \quad \ldots \\
\text{Net liability} & \quad \ldots 
\end{align*}
\]

At times credit to unmarked application is given in the ratio of gross liability as reduced by the marked applications. In this case, the individual liability calculated will differ from the liability calculated as per the previous procedure.

**Note**: In case some figure is negative it will be transferred to other underwriters’ account in the ratio of gross liability inter se.

In case of Partial Underwriting
(a) If a part of the issue of shares or debentures is underwritten only by one underwriter: In such a case only a part of the whole issue, like 60% or 70% is underwritten only by a single underwriter and for the balance 40% or 30% of the issue, company itself is said to underwrite the same. In this case, unmarked applications are treated as marked as far as the company is concerned.

In such a case, the gross liability of the underwriter will be that part of the issue of shares or debentures which is underwritten, say 60% or 70% and the net liability will be determined by deducting the marked applications (the applications sent through him) from the gross liability. Thus, the net liability will be determined as follows:

Net liability = Gross liability (say 60% or 70% of the issue) - Marked applications.

(b) If the part of the issue of shares or debentures is underwritten by a number of underwriters: In such a case part of the whole issue, like 70% or 80% is underwritten by a number of underwriters and for the balance 30% or 20%, the company itself is said to have underwritten the same. As such, the unmarked applications are treated as marked so far as the company is concerned. In such a case, the method of determining the net liability of the respective underwriters is similar to the method discussed above (a).

7. Firm Underwriting

In the case of ‘firm underwriting’, the underwriters take up the agreed number of shares or debentures to be ‘firm underwritten’ in addition to unsubscribed shares or debentures, if any. In such an instance an underwriter is not allowed to set off his firm underwriting against his liability otherwise determined, he will then have to subscribe for both shares/debentures ‘underwritten firm’ and for shares which he has to take under the underwriting contract, ignoring firm underwriting.

While computing the individual liability of the underwriters, the ‘firm underwriting’ can be dealt with in any of the below mentioned manner in case of no specific instructions:

(a) The ‘firm underwriting’ may be adjusted against the individual liability of each underwriter separately or may be treated at par with marked applications.

When firm underwriting is treated at par with marked applications the statement of liability of underwriters will be as under:

Gross Liability (agreed ratio-total shares underwritten) ..................................
Less: Marked applications including firm underwriting ..............................
Balance left ..............................................................................
Less: Unmarked application (ratio of gross liability) .................................
Net liability ..............................................................................
Add: Firm underwriting ..............................................................
Total Liability ...........................................................................

(b) The benefit of ‘firm underwriting’ may be shared by all underwriters or ‘firm underwriting’ may be treated at par with unmarked applications. In such a case, the shares/debentures underwritten firm will be included in the unmarked forms. Hence, the state of liability of underwriters will appear as shown above except that shares/debentures underwritten firm by each underwriter will not be specifically adjusted against his individual liability but will be included in the total unmarked forms to be distributed amongst all underwriters in the ratio of their gross liability.

Note: If the question is not specific regarding the treatment of ‘firm underwriting’ students may follow anyone of the treatments discussed above and may give a footnote to this effect.
8. Accounting Treatment relating to Underwriting of Shares or Debentures

(a) When the shares or debentures are allotted to the underwriters in respect of their liability:
   Underwriters A/c Dr. with the value of the shares or debentures taken
to Share Capital A/c up by the underwriters
to Debentures A/c

(b) When commission becomes payable to the underwriters:
   Underwriters Commission A/c Dr. with the amount of commission due on the total
   To Underwriters A/c issue price of the shares underwritten

(c) When the net amount due from the underwriters on the shares or debentures taken up by them is received:
   Bank Dr. with the net amount due
   To Underwriters A/c

Note: Underwriting commission is not generally paid in cash. Instead the same is adjusted against the money due on shares or debentures taken up by the underwriters and only the net amount (i.e., total amount due on shares or debentures taken up by the underwriters minus the underwriting commission) is received from the underwriters.

Illustration 9:
Lillies Ltd. issued 1,00,000 equity shares, where the issue was underwritten by 3 underwriters as follows:
   A 40%; B 30%; C 30%
Applications for 60,000 shares were received in all, out of which applications for 20,000 shares had the stamp of A; those for 10,000 shares that of B and those for 20,000 shares that of C. The remaining applications for 10,000 shares did not bear any stamp.
Determine the liability of the underwriters.

Solution:

<table>
<thead>
<tr>
<th>Net Liability of Underwriters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Gross liability in the agreed ratio of 40 : 30 : 30</td>
</tr>
<tr>
<td>Less: Marked applications</td>
</tr>
<tr>
<td>Balance left</td>
</tr>
<tr>
<td>Less: Unmarked applications in the ratio of gross liability, i.e., 40 : 30 : 30 (10,000 Unmarked)</td>
</tr>
<tr>
<td>Net liability</td>
</tr>
</tbody>
</table>

Illustration 10:
Ramona Ltd., issued 50,000 equity shares of which only 60% was underwritten by Green. Applications for 45,000 shares were received in all out of which application for 26,000 were marked.
Determine the liability of Green.
Lesson 3  Accounting for Share Capital  121

Solution:

Gross liability of Green being 60% of 50,000 shares = 30,000 shares
Less: Marked applications Net liability of Green = 26,000 shares
Net liability of Green = 4,000 shares

Notes:

(1) Had the marked applications been for 30,000 shares or more, Green would have had no liability at all.
(2) Had the applications received by the company been for all the 50,000 shares Green would have had no liability at all, even though the marked applications were for 26,000 shares.
(3) Had the applications received by the company been for 48,000 shares, Green’s liability would have had restricted to (50,000 - 48,000) = 2,000 shares, even though the marked applications were for 26,000 shares.

Working Assumption: In case the marked and unmarked applications is not be given in the question, then one can assume the number of applications received as marked applications (as proportionate to that part of the issue underwritten as received through the underwriters.)

Illustration 11:

ABC Ltd. issued 30,000, 6% debentures of Rs. 100 each. 60% of the issue was underwritten by Delton. Applications for 28,000 debentures were received by the company. Determine the liability of Delton.

Solution:

Gross liability of Delton being 60% of 30,000 debentures = 18,000 debentures
Less: Marked applications (assumed 60%) i.e., 60/100 x 28,000 = 16,800 debentures
Net liability of Delton = 1,200 debentures

Alternatively Delton’s liability can be determined in the following way:

Number of debentures not subscribed for by the public = (30,000 - 28,000) = 2,000 debentures
Delton’s liability = 60% of 2,000 debentures = 1,200 debentures

Illustration 12:

Binsar Ltd. issued 12% 10,000 Preference Shares of Rs 10 each. The issue was underwritten as follows: Apple 30%, Mango 30%, Orange 20%. Application for 8,000 shares were received by the company in all. Determine the liability of the respective underwriters.

Solution:

\[
\begin{array}{|c|c|c|}
\hline
 & Apple (30\%) & Mango (30\%) & Orange (20\%) \\ 
\hline
\text{Gross liability in the agreed ratio or } & 3,000 & 3,000 & 2,000 \\ 
30 : 30 : 20 & & & \\
\hline
\text{Less: Marked application, i.e., } & 2,400 & 2,400 & 1,600 \\ 
8,000 & & & \\
application in the ratio of 3/10 : 3/20 : 2/10 & & & \\
\hline
\text{Net liability} & 600 & 600 & 400 \\
\hline
\end{array}
\]

Alternatively the liability of the respective underwriters can also be determined in the following manner:

Shares issued 10,000
Less: Applications received 8,000
Unsubscribed shares 2,000
Apple’s liability = 30% of 2,000 = 600 shares
Mango’s liability = 30% of 2,000 = 600 shares
Orange’s liability = 20% of 2,000 = 400 shares
Total liability of Apple, Mango and Orange = 600 + 600 + 400 = 1,600 shares.
which represent 80% of the total issue underwritten. The balance (2,000 - 20% of the issue not underwritten will remain as unissued. 1,600) = 400 shares representing

Illustration 13:
Emess Ltd. issued 40,000 shares which were underwritten. P: 24,000 shares Q: 10,000 shares and R: 6,000 shares. The underwriters made applications for firm underwriting as under:
P: 3,200 shares; Q: 1,200 shares; and R: 4,000 shares. The total subscriptions excluding firm underwriting (including marked applications) were 20,000 shares.
The marked applications were - P: 4,000 shares; Q: 8,000 shares; and R: 2,000 shares
Prepare a statement showing the net liability of underwriters

Solution:
Working Note: Firm underwriting shares are treated as unmarked applications.

Statement of Computation of Liability

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>Q</th>
<th>R</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Liability</td>
<td>24000</td>
<td>10000</td>
<td>6000</td>
<td>40000</td>
</tr>
<tr>
<td>Less: marked Applications</td>
<td>4000</td>
<td>8000</td>
<td>2000</td>
<td>14000</td>
</tr>
<tr>
<td>Balance</td>
<td>20000</td>
<td>2000</td>
<td>4000</td>
<td>26000</td>
</tr>
<tr>
<td>Less: Unmarked Applications in ratio of gross Liability (12:5:3)</td>
<td>8640</td>
<td>3600</td>
<td>2160</td>
<td>14400</td>
</tr>
<tr>
<td>Balance Net</td>
<td>11360</td>
<td>(1600)</td>
<td>1840</td>
<td>11600</td>
</tr>
<tr>
<td>Credit of Q’s capital over P &amp; R in ratio of 12:3</td>
<td>(1280)</td>
<td>+1600</td>
<td>(320)</td>
<td></td>
</tr>
<tr>
<td>Net Liability</td>
<td>10,080</td>
<td>0</td>
<td>1,520</td>
<td>11,600</td>
</tr>
<tr>
<td>Add: Firm Underwriting</td>
<td>3,200</td>
<td>1,200</td>
<td>4,000</td>
<td>8,400</td>
</tr>
<tr>
<td>Total Liability</td>
<td>13,280</td>
<td>1,200</td>
<td>5,520</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Illustration 14:
Sam Limited invited applications from public for 1,00,000 equity shares of Rs 10 each on a premium of X 5 per share. The entire issue was underwritten by the underwriters Anita, Babita, Chavi and David to the extent of
30%, 30%, 20% and 20% respectively with the provision of firm underwriting of 3,000, 2,000, 1,000 and 1,000 shares respectively. The underwriters were entitled to the maximum commission permitted by law.

The company received applications for 70,000 shares from public out of which applications for 19,000, 10,000; 21000 and 8,000 shares were marked in favour of Anita, Babita, Chavi and David respectively.

Calculate the liability of each one of the underwriters. Also ascertain the underwriting commission @ 2.5% payable to the different underwriters.

**Solution:**

**Statement of Liability of Underwriters:**

Note: by treating ‘firm underwriting shares’ on a par with marked applications

<table>
<thead>
<tr>
<th></th>
<th>Anita</th>
<th>Babita</th>
<th>Chavi</th>
<th>David</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Liability</td>
<td>30000</td>
<td>30000</td>
<td>20000</td>
<td>20000</td>
<td>100,000</td>
</tr>
<tr>
<td>Less: marked Applications</td>
<td>19000</td>
<td>10000</td>
<td>21000</td>
<td>8000</td>
<td>58000</td>
</tr>
<tr>
<td>Balance</td>
<td>11000</td>
<td>20000</td>
<td>(1000)</td>
<td>12000</td>
<td>42000</td>
</tr>
<tr>
<td>Less: unmarked Applications in ratio of gross Liability (30:30:20:20)</td>
<td>3600</td>
<td>3600</td>
<td>2400</td>
<td>2400</td>
<td>12000</td>
</tr>
<tr>
<td>Balance Net</td>
<td>7400</td>
<td>16400</td>
<td>(3400)</td>
<td>9600</td>
<td>30000</td>
</tr>
<tr>
<td>Less: Firm Underwriting</td>
<td>3000</td>
<td>2000</td>
<td>1000</td>
<td>1000</td>
<td>7000</td>
</tr>
<tr>
<td>Balance</td>
<td>4400</td>
<td>14400</td>
<td>(4400)</td>
<td>8600</td>
<td>23000</td>
</tr>
<tr>
<td>Less: Credit of excess to others in ratio (30:30:20)</td>
<td>(1650)</td>
<td>(1650)</td>
<td>+4400</td>
<td>(1100)</td>
<td></td>
</tr>
<tr>
<td>Net Liability</td>
<td>2750</td>
<td>12750</td>
<td>0</td>
<td>7500</td>
<td>23000</td>
</tr>
<tr>
<td>Total Liability, including Firm Underwriting</td>
<td>5750</td>
<td>14750</td>
<td>1000</td>
<td>8500</td>
<td>30000</td>
</tr>
</tbody>
</table>

Alternatively, the ‘firm underwriting shares’ may be treated on a par with unmarked applications.

Applications received including firm underwritten = 70,000 + 7,000 = 77,000

Less; Marked application = 58,000

Net Unmarked Application liability of underwriters (No. of Shares) = 19,000

<table>
<thead>
<tr>
<th></th>
<th>Anita</th>
<th>Babita</th>
<th>Chavi</th>
<th>David</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Liability</td>
<td>30000</td>
<td>30000</td>
<td>20000</td>
<td>20000</td>
<td>100,000</td>
</tr>
<tr>
<td>Less : unmarked Applications in ratio of gross Liability (30:30:20:20)</td>
<td>5700</td>
<td>5700</td>
<td>3800</td>
<td>3800</td>
<td>19,000</td>
</tr>
<tr>
<td>Balance</td>
<td>24300</td>
<td>24300</td>
<td>16200</td>
<td>16200</td>
<td>81,000</td>
</tr>
<tr>
<td>Less: Marked Application</td>
<td>19000</td>
<td>10000</td>
<td>21000</td>
<td>8000</td>
<td>58000</td>
</tr>
<tr>
<td>Balance Net</td>
<td>5300</td>
<td>14300</td>
<td>(4800)</td>
<td>8200</td>
<td>23000</td>
</tr>
<tr>
<td>Adjustment of excess</td>
<td>(1800)</td>
<td>(1800)</td>
<td>+4800</td>
<td>(1200)</td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>3500</td>
<td>12500</td>
<td>-</td>
<td>7000</td>
<td>23000</td>
</tr>
</tbody>
</table>
Add: Firm Liability  
<table>
<thead>
<tr>
<th>Total Liability, including Firm Underwriting</th>
<th>3000</th>
<th>2000</th>
<th>1000</th>
<th>1000</th>
<th>7000</th>
</tr>
</thead>
<tbody>
<tr>
<td>6500</td>
<td>14500</td>
<td>1000</td>
<td>8000</td>
<td>30000</td>
<td></td>
</tr>
</tbody>
</table>

Calculation of Underwriting commission

<table>
<thead>
<tr>
<th>Underwriting commission is payable at the rate of 2.5% of the issue price of shares;</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 30000 * 15 * 2.5%</td>
<td>11,250</td>
</tr>
<tr>
<td>B = 30000 * 15 * 2.5%</td>
<td>11,250</td>
</tr>
<tr>
<td>C = 20000 * 15 * 2.5%</td>
<td>7,500</td>
</tr>
<tr>
<td>D = 20000 * 15 * 2.5%</td>
<td>7,500</td>
</tr>
</tbody>
</table>

LESSON ROUND UP

- Share represents a singular unit into which the total share capital of a company is divided.
- Share capital includes majorly the following two types of shares under the Companies Act, 2013:
  (a) preference shares and (b) equity shares.
- An equity share is the one which is not a preference share. Equity shares are also known for their risk-bearing. Preference shares are the shares that hold preferential rights as to the payment of dividend at a fixed rate; and the return of capital on winding up of the company.
- Shares may be issued for cash or for a consideration other than cash. When a company allots fully paid shares to promoters or to creditors or to any other party for the services rendered by them, it is known as issue of shares for consideration other than cash.
- Shares of a company may be issued at:
  a. Par- When shares are issued on a price equivalent to its face value.
  b. Premium- When shares are issued at a price higher than the face value.
  c. Discount- When shares are issued at a price lower than the face value.
- Restrictions on the usage of the Securities premium money received has been laid u/s 52 (2) of Companies Act 2013
- When the number of shares applied for exceeds the number of shares issued, the shares are said to be oversubscribed. In such a case, some applications may be rejected; some applications are accepted in full; and allotment is made to the remaining applicants on pro-rata basis.
- Forfeiture of shares is considered as the compulsory termination of membership by way of penalty for non-payment of allotment and/or any call money.
- The forfeited shares may be reissued at:
  a. Par
  b. Premium
  c. Discount
– In case of reissue of forfeited shares at a premium, the entire amount standing to the credit of Shares Forfeited Account would be treated as net gain and transferred to Capital Reserve Account.

– In case the forfeited shares are reissued at a discount, the amount of discount can, in no case, exceed the amount credited to Shares Forfeited Account.

– As per Section 68, 69, 70 of the Companies Act, 2013, a company may purchase its own shares or other specified securities out of its free reserves and this is known as buy-back.

– A company is under a legal obligation to first offer the subsequent issue of shares to its existing equity shareholders. This right is called rights issue.

– Company may issue fully paid up bonus shares to its members, in any manner out of (i) its free reserves; (ii) the securities premium account; or (iii) the capital redemption reserve account.

– Sweat equity shares refers to equity shares given to the company’s employees/ directors on favourable terms in recognition of their work at a discount or consideration other than cash.

– Underwriting is known as a guarantee given by the underwriters to the company that the shares or debentures offered to the public will be subscribed for in full. An underwriting agreement may be:
  a. Complete Underwriting

**SELF TEST QUESTIONS**

1. Distinguish between equity shares and preference shares.
2. Discuss the classes of shares on the basis of participation.
3. Enumerate the restrictions on application of premium money received.
4. ABC Ltd. brought out an issue which was oversubscribed. What option does the company have in case of over subscription?
5. Describe the accounting treatment of Calls in advance.
6. What do you mean by share forfeiture?
7. Discuss the advantages of buy-back of shares.
8. Enumerate the procedure for issue of sweat equity shares.
9. Elaborate the types of underwriting options available to a company.
## Lesson Outline

- Introduction
- Kinds of Debentures
- Issue of Debentures at
  - Par
  - Premium
  - Discount
- Issue of Debentures for Consideration Other than Cash
- Issue of Debentures as Collateral Security
- Debenture Interest
- Treatment of Discount/loss on Issue of Debentures
- Redemption of Debentures
  - Par
  - Premium
  - Discount
- Conversion of Debentures
- Purchase of Debentures in the open market
- LESSON ROUND UP
- SELF TEST QUESTIONS

## Learning Objectives

There are different sources of financing for long term as well as short-term funds requirements of a business. Long-term sources of funds include issue of share capital. But this is not always sufficient to meet the expansion needs of the business. In such a situation, the corporates opt for debt financing through financial institutions, banks, or by issuing debentures through private placement, or by offering them to the general public by issuing a prospectus. It helps in tax savings and therefore helps in reducing the cost of capital. Raising long-term fund requirements through debt as well as equity helps in designing the appropriate capital structure of the company. This lesson deals with the concept and methods of issue as well as redemption of debentures. After studying this chapter, you will be able to learn

- Meaning of debentures
- Methods for the issue of debentures
- Methods of the redemption of debentures
- Open market operations
- Working of cum-interest and ex-interest
In addition to raising funds by the issue of different kinds of shares, a company may supplement its capital by arranging money in the form of both short-term and long-term borrowings. Short-term borrowings are carried out by way of promissory notes, bills of exchange, bank overdrafts, cash credits, public deposits, etc. while long-term borrowings include by loan on mortgage of property, term loans from financial institutions, public deposits for a long period, issue of debentures, etc.

Debentures are part of loan capital and the company is liable to pay interest thereon whether it earns profit or not. Debentures include debenture stock, bonds or any other instrument of a company evidencing a debt whether constituting a charge on the assets of the company or not.

Debentures may be of different kinds depending upon the conditions of their issue:

(a) Secured or Mortgage
When debentures are secured by a mortgage or charge on the property of the company, they are called secured or mortgage debentures.

(b) Unsecured or Naked
When debentures are issued without any security, they are termed as unsecured or naked debentures.

(c) Bearer
These debentures are payable to bearer and are transferable by mere delivery. Interest coupons are attached to each individual debenture. The interest and principal amount on such debentures is payable upon presentation and delivery of coupons and debentures.

(d) Registered
Interest and principal amount is paid only to the person whose name is registered in the debenture ledger. Such debentures are transferable through a transfer deed.

(e) Convertible
Debentures may be convertible into preference or equity shares of the company on certain specified dates on the basis of an agreement between the company and the debenture holders.

(f) Non-Convertible
Such debentures are paid into cash.

(g) Redeemable
Such debentures are paid either at par or at a premium after the expiry of a particular period or under a system of periodical drawings.
(h) Irredeemable or Perpetual
Such debentures are payable either on a happening of the contingency, or when the company winds its business up, or when the company decides to redeem, itself.

(i) First Mortgage Debentures
Such debentures are paid on the basis of priority as compared to other debentures.

(j) Second Mortgage Debentures
Such debentures are paid after the redemption of first mortgage debentures.

**ISSUE OF DEBENTURES**
Subject to the restrictions imposed by Section 71 of the Companies Act, 2013, a company can issue debentures. Applications for debentures are invited from the public through a prospectus and the applicants are asked to pay the application money along with the applications. The company may ask for payment of the whole of the amount along with the application or by installments.

(a) For Cash
   (i) At Par
   (ii) At a Premium
   (iii) At a Discount

(b) For Consideration Other than Cash

(c) As Collateral Security
Conditions for issue of debentures as per Companies Act, 2013

1. Issue of Debentures by Special Resolution
A company can issue partly or fully convertible debentures by passing special resolution at a general body meeting.

2. No Voting Rights
No company can issue any debentures carrying any voting rights.

3. Terms for the Issue of Secured Debentures
Secured debentures may be issued according to prescribed terms and conditions.

4. Creation and Utilization of Debenture Redemption Reserve
The company shall create Debenture Redemption Reserve out of its divisible profits and the amount credited to such an account shall not be utilized for any purpose other than the redemption of debentures.

5. Debenture Trustee(s)
A company cannot issue a prospectus or make an offer or invitation to more than 500 persons for subscribing to debentures unless the company has before issuing such a prospectus, appointed one or more debenture trustees.

A debenture trustee shall take steps to protect the interest of the debenture holders and redress the grievances in accordance with the rules as may be prescribed.

Difference between debentures and shares:

<table>
<thead>
<tr>
<th>Points</th>
<th>Debentures</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>Debenture is a part of loan capital or borrowing</td>
<td>Share capital is an ownership capital.</td>
</tr>
<tr>
<td>Status</td>
<td>Debenture holder is creditor of company</td>
<td>Shareholder is the owner of the company</td>
</tr>
<tr>
<td>Income</td>
<td>Interest is the income on the investment in debentures</td>
<td>Dividend is the income on investment in shares</td>
</tr>
<tr>
<td>Charges or Appropriation</td>
<td>Payment of interest is charge against and is payable even if there is no profit</td>
<td>Payment of dividend is an appropriation of profit and not payable if there is no profit.</td>
</tr>
<tr>
<td>Voting rights</td>
<td>Debenture holders do not have any voting rights.</td>
<td>Shareholders generally enjoy the voting rights</td>
</tr>
<tr>
<td>Issue at discount</td>
<td>No restriction is imposed on the issue of debentures at discount</td>
<td>Section 53 prohibits the issue of shares at discount</td>
</tr>
<tr>
<td>Rate</td>
<td>Rate of interest is fixed</td>
<td>Rate of dividend may vary from year to year for equity shares</td>
</tr>
<tr>
<td>Convertibility</td>
<td>Debentures can be convertible</td>
<td>Equity shares can never be convertible</td>
</tr>
</tbody>
</table>

Issue of debentures for cash
Debentures may be issued for cash on a par, a premium or discount. When the debentures are issued for cash, the entire issue price may be received on application itself or the amount may be payable in installments, such as on application, on allotment and balance in calls.
Any premium or discount on the issue of debentures is generally recorded at the time of making allotment.

Accounting treatment when the debentures are at a par:

(a) When the full issue price is payable in lumpsum along with application

1. On receipt of application money:
   - Bank Dr. (with the money received on application)
   - To Debentures Application and Allotment A/c

2. On allotment:
   - Debenture Application and Allotment A/c Dr. (with the money received on debentures allotted)
   - To Debentures A/c

(b) When the amount is payable in instalments

1. On receipt of application money:
   - Bank Dr. (with the money received on application)
   - To Debentures Application A/c

2. On allotment of debentures:
   - Debenture Application A/c Dr. (with the application money on debentures allotted)
   - To Debentures A/c

3. On allotment money due
   - Debenture allotment A/c Dr (with the allotment money due)
   - To Debentures A/c

4. On receipt of allotment money:
   - Bank Dr. (with the money received on allotment)
   - To Debenture Allotment A/c

5. On making calls:
   - Debenture Calls A/c Dr. (with the money due on respective calls)
   - To Debenture A/c

6. On receipt of call money:
   - Bank Dr. (with the money received on respective calls)
   - To Debenture Calls A/c

Over subscription: The excess application money may be retained for adjustment towards allotment and particular calls similar to share application money.

But money received from applicants to whom no debenture has been allotted will be refunded to them. The following journal entry is made in this regard:

Debenture Application A/c Dr
To Bank A/c
Illustration 1.

ABC Ltd. made an issue of 50,000 12% Debentures of Rs 100 each, payable as follows:
Rs 25 on Application
Rs 50 on Allotment
Rs25 on First and Final Call.

Applications were received for 52,000 debentures and the directors allotted 50,000 debentures rejecting applications for 2,000 debentures. The application money received for 2,000 rejected debentures was duly refunded. All the calls were made and the moneys duly received.

Show the Journal Entries to record the above transactions and prepare the Balance Sheet of the company.

Solution:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Particulars</th>
<th>Debit (Rs)</th>
<th>Credit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Bank A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debenture Application A/c</td>
<td></td>
<td>13,00,000</td>
</tr>
<tr>
<td></td>
<td>(Being application money of Rs 25 each on 52,000 debentures received)</td>
<td></td>
<td>13,00,000</td>
</tr>
<tr>
<td>(ii)</td>
<td>12% Debenture Application A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures A/c</td>
<td></td>
<td>13,00,000</td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
<td>12,50,000</td>
</tr>
<tr>
<td></td>
<td>(Being allotment of 50,000 debentures as per board’s resolution dated and 2,000 debentures rejected and refunded)</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>(iii)</td>
<td>12% Debenture Allotment A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures A/c</td>
<td></td>
<td>25,00,000</td>
</tr>
<tr>
<td></td>
<td>(Being allotment money due on 50,000 debentures @ Rs 50 each)</td>
<td></td>
<td>25,00,000</td>
</tr>
<tr>
<td>(iv)</td>
<td>Bank A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debenture Allotment A/c</td>
<td></td>
<td>25,00,000</td>
</tr>
<tr>
<td></td>
<td>(Being allotment money received)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(v)</td>
<td>12% Debenture First and Final call A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures A/c</td>
<td></td>
<td>12,50,000</td>
</tr>
<tr>
<td></td>
<td>(Being call money due on 50,000 debentures @ Rs 25 each)</td>
<td></td>
<td>12,50,000</td>
</tr>
<tr>
<td>(vi)</td>
<td>Bank A/c –</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debenture First and Final call A/c</td>
<td></td>
<td>12,50,000</td>
</tr>
<tr>
<td></td>
<td>(Being the call money received)</td>
<td></td>
<td>12,50,000</td>
</tr>
</tbody>
</table>
ABC Ltd.

Balance Sheet as on ............

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQUITY AND LIABILITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non Current Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Term Borrowings</td>
<td>1</td>
<td>50,00,000</td>
</tr>
<tr>
<td>ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalent</td>
<td></td>
<td>50,00,000</td>
</tr>
</tbody>
</table>

Notes to Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Long Term Borrowings</td>
<td>1</td>
<td>50,00,000</td>
</tr>
<tr>
<td>12% Debentures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Cash and Cash Equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash at Bank</td>
<td></td>
<td>50,00,000</td>
</tr>
</tbody>
</table>

**Issue of debentures at premium**

When the debentures are issued for cash at premium, the amount of premium is recorded at the time of making entries for allotment money.

The entries for receipt of application money and transfer of application money to debenture account are same as issue at par.

The entries for allotment are

(i) When allotment money becomes due

Debenture Allotment A/c Dr
To Debenture A/c
To Securities Premium A/c

(ii) When allotment money is received

Bank A/c Dr
To Debenture Allotment A/c

And for calls the entries are same as for issue at par.

**Illustration 2.**

Z Ltd. issued 2,500, 10% Debentures of Rs.100 each, a premium of 10% payable as Rs. 20 on application, Rs.50 on allotment (including the premium) and the balance on first & final call. The public applied for 3,500 debentures. Applications for 2,250 debentures were accepted in full, applicants for 500 were allotted 250 debentures, and remaining applications were rejected. All money was duly received.

Journalize these transactions.
Solution:  

### Journal Entries

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs)</th>
<th>Credit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Bank A/c</td>
<td>Dr. 70,000</td>
<td>70,000</td>
</tr>
<tr>
<td>To Debenture Application A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Being application money received on 3,500 debentures)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Debentures Application A/c</td>
<td>Dr. 70,000</td>
<td></td>
</tr>
<tr>
<td>To 10% Debentures A/c</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>To Debentures Allotment A/c</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>To Bank A/c</td>
<td></td>
<td>15,000</td>
</tr>
<tr>
<td>(Being the application money adjusted and the surplus refunded)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iii) Debenture Allotment A/c</td>
<td>Dr. 1,25,000</td>
<td></td>
</tr>
<tr>
<td>To 10% Debentures A/c</td>
<td></td>
<td>1,00,000</td>
</tr>
<tr>
<td>To Securities Premium A/c</td>
<td></td>
<td>25,000</td>
</tr>
<tr>
<td>(Being the Amount due on allotment @ Rs. 50 on 2,500 debentures)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iv) Bank A/c</td>
<td>Dr. 1,20,000</td>
<td></td>
</tr>
<tr>
<td>To Debentures Allotment A/c</td>
<td></td>
<td>1,20,000</td>
</tr>
<tr>
<td>(Being the Balance of the amount due on allotment received)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(v) Debentures Call A/c</td>
<td>Dr. 1,00,000</td>
<td></td>
</tr>
<tr>
<td>To 10% Debentures A/c</td>
<td></td>
<td>1,00,000</td>
</tr>
<tr>
<td>(Being the Amount due on Call @ Rs. 40 on 2,500 debentures)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(vi) Bank A/c</td>
<td>Dr. 1,00,000</td>
<td></td>
</tr>
<tr>
<td>To Debentures Call A/c</td>
<td></td>
<td>1,00,000</td>
</tr>
<tr>
<td>(Being the Amount due on call received)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Issue of debentures at discount

If the debentures are issued at a price lower than the nominal value of the debentures, the debentures are said to be issued at a discount. The difference between the nominal value and the issue price is regarded as the discount.

Such a discount on the issue of debentures may either be written off against revenue profit or capital profits of the company. When debentures are issued at a discount the Debentures Account should be credited with the nominal value of the debentures and the discount allowed on issue of debentures. It being a capital loss should be debited to “Discount on Issue of Debentures Account”. Thus, the accounting entry will be as follows:

- Debentures Allotment A/c Dr (with the amount due on allotment)
- Discount on issue of Debentures A/c Dr (with the amount of discount)
  - To Debentures A/c (with the total)

### Illustration 3.

Z Ltd. issued 5,000, 14% debentures of Rs 100 each at a discount of 5%, the discount being adjustable on allotment.
The debentures were payable as follows:
On Application - Rs. 20
On Allotment - Rs. 25
On First and Final Call - Rs. 50

The debentures were fully subscribed and the money was duly received.

Show the cash book and journal entries and prepare the balance sheet of the company.

Solution:

<table>
<thead>
<tr>
<th>Dr</th>
<th>Cash Book (Bank Column)</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Particulars</strong></td>
<td><strong>Amount (Rs)</strong></td>
<td><strong>Particulars</strong></td>
</tr>
<tr>
<td>To 14% Debenture Application A/c</td>
<td>1,00,000</td>
<td>By Balance c/d</td>
</tr>
<tr>
<td>(Application money on 5,000 debentures @ Rs 20 per debenture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To 14% Debenture Allotment A/c</td>
<td>1,25,000</td>
<td></td>
</tr>
<tr>
<td>(Allotment money on 5,000 debentures @ Rs 25 per debenture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To 14% Debenture First and Final Call A/c</td>
<td>2,50,000</td>
<td></td>
</tr>
<tr>
<td>(First and final call money on 5,000 debentures @ Rs 50 per debenture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Z Ltd.

Journal Entries

<table>
<thead>
<tr>
<th>S. No</th>
<th>Particulars</th>
<th>Debit (Rs)</th>
<th>Credit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>14% Debenture Application A/c</td>
<td>Dr.</td>
<td>1,00,000</td>
</tr>
<tr>
<td></td>
<td>14% Debenture Allotment A/c</td>
<td>Dr.</td>
<td>1,25,000</td>
</tr>
<tr>
<td></td>
<td>Discount on Issue of Debentures A/c</td>
<td>Dr.</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td>To 14% Debentures A/c</td>
<td></td>
<td>2,50,000</td>
</tr>
<tr>
<td></td>
<td>(Allotment of 5,000 14% debentures of Rs. 100 each issued at a discount of 5% and allotment money due on 5,000 debentures @ Rs 25 per debenture as per Board’s resolution dated..................)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii)</td>
<td>14% Debenture First and Final Call A/c</td>
<td>Dr.</td>
<td>2,50,000</td>
</tr>
<tr>
<td></td>
<td>To 14% Debentures A/c</td>
<td></td>
<td>2,50,000</td>
</tr>
<tr>
<td></td>
<td>(First and final call money due on 5,000 debentures @ Rs 50 per debentures as per Board’s resolution dated..................)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Z Ltd.**

**Balance Sheet as on .............**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EQUITY AND LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Current Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-Term Borrowings</td>
<td>1</td>
<td>5,00,000</td>
</tr>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current assets</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Other non-current assets</td>
<td></td>
<td>25,000</td>
</tr>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalent</td>
<td></td>
<td>4,75,000</td>
</tr>
</tbody>
</table>

**Notes to Account**

1. **Long-Term Borrowings 14% Debentures**
   - 1 5,00,000

2. **Other non-current assets Discount on the issue of debentures**
   - 2 25,000

**ISSUE OF DEBENTURES FOR CONSIDERATION OTHER THAN CASH**

Sometimes a company may allot debentures (on a par, premium or discount) to vendors as a payment for the purchase price of the assets. The issue of debentures is then for consideration other than cash. In such a case, the following journal entries are made:

**1) For acquisition of assets:**

- **Sundry Assets (Individually) A/c Dr.** (with the value of assets)
  - To Vendors A/c (with the purchase price)

  Notes: (i) If the value of debentures allotted is more than the agreed purchase price, the difference is debited to Goodwill Account.
  (ii) Similarly, if the value of debentures allotted is less than the agreed purchase price, it is credited to Capital Reserve Account.

**2) (a) On allotment of debentures (at par)**

- **Vendors A/c Dr.** (with the value of debentures)
  - To Debentures A/c

**b) On allotment of debentures (at premium)**

- **Vendors A/c Dr.** (with the purchase price)
  - To Debentures A/c (with the nominal value)
  - To Securities Premium A/c (with the amount of premium)
(c) On allotment of debentures (at a discount)

Vendors A/c Dr. (with the amount of purchase)
Discount on Issue of Debentures A/c Dr. (with the amount of discount)

To Debentures A/c (with the nominal value)

Illustration 4.

Radha Ltd. purchased machinery worth Rs.1,20,000 and building worth Rs. 2,00,000 from Deepa Ltd. for an agreed purchase consideration of Rs. 3,00,000 to be satisfied by the issue of 3,000, 12% debentures of Rs. 100 each.

Show the necessary journal entries in the books of Radha Ltd.

Solution:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Particulars</th>
<th>Debit (Rs)</th>
<th>Credit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Building A/c</td>
<td>Dr.</td>
<td>2,00,000</td>
</tr>
<tr>
<td></td>
<td>Plant and Machinery A/c</td>
<td>Dr.</td>
<td>1,20,000</td>
</tr>
<tr>
<td></td>
<td>To Deepa Ltd.</td>
<td></td>
<td>3,00,000</td>
</tr>
<tr>
<td></td>
<td>To Capital Reserve A/c</td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>(Purchase of sundry assets and transfer of capital profits as per agreement with the vendor dated.................................)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Deepa Ltd.</td>
<td>Dr.</td>
<td>3,00,000</td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures A/c</td>
<td></td>
<td>3,00,000</td>
</tr>
<tr>
<td></td>
<td>(Being 3,000, 12% Debentures of Rs 100 each allotted to vendors for consideration other than cash as per Board’s resolution dated.............)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DEBENTURES ISSUED AS A COLLATERAL SECURITY

The term ‘Collateral Security’ may be defined as additional security given for a loan. Where a company obtains a secured loan from a bank or insurance company, it may mortgage some of its assets as a security against the said loan. But the lending institution may insist on some more assets as a collateral security so that the amount of loan can be realized in full with the help of collateral security, in case the amount realized from the sale of first security falls short of the loan money. In such a situation, the company may issue its own debentures to the lender as collateral security against the loan in addition to any other security that may be offered. Such an issue of debentures is known as “Debentures issued as Collateral Security”.

In such a case, the lender has the absolute right over the debentures until and unless the loan is repaid. On repayment of the loan, however, the lender is legally bound to release the debentures forthwith. But in case the loan is not repaid by the company on the due date or in the event of any other breach of agreement, the lender has the right to retain these debentures and to realize them.

The holder of such debentures is entitled to interest only on the amount of loan, but not on the debentures.
Accounting Treatment of Collateral Security

FIRST METHOD

No accounting entry is required to be shown in the books of account at the time of issue of such debentures because there is no immediate liability created by the company.

But the existence of such debentures issued as collateral security has to be mentioned by way of a note on the Balance Sheet under the specific loan account.

Illustration 5.

B Ltd. secured an overdraft of Rs. 80,000 from the bank by issuing 900, 12% Debentures of Rs. 100 each as collateral security. Prepare the Balance Sheet of the Company.

Solution

Balance Sheet of Z Ltd. as at.....

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQUITY AND LIABILITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liability</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Short-term borrowings</td>
<td></td>
<td>80,000</td>
</tr>
</tbody>
</table>

Notes to Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Short-term borrowings</td>
<td></td>
</tr>
<tr>
<td>Bank Overdraft</td>
<td></td>
</tr>
<tr>
<td>(Secured by the issue of 900, 12% Debentures of Rs. 100 each as collateral security)</td>
<td></td>
</tr>
</tbody>
</table>

SECONd METHOD

If it is desired that such an issue of debentures as collateral security is to be recorded in the books of account, the accounting entries will be as follows:

(i) On issue of debentures as collateral security

Debentures Suspense A/c Dr. (with the nominal value of the debentures issued)

To Debentures A/c

In this case, Debentures Suspense Account will appear on the asset side of the balance sheet under the heading Miscellaneous Expenditure. Debentures Account will appear as a liability on the liabilities side of the Balance Sheet.

(ii) On repayment of the loan and release of debentures

Debentures A/c Dr. (with the nominal value of the debentures released)

To Debentures Suspense A/c

Note: The net effect of the above two entries is nil. Both the Debentures Suspense Account and the Debentures Account are cancelled on repayment of the loan. As such, this method is rarely followed in practice.
Illustration 6.

B Ltd. secured an overdraft of Rs. 80,000 from the bank by issuing 900, 12% Debentures of Rs. 100 each as collateral security. Prepare the Balance Sheet of the Company.

Solution

Journal Entries

Debentures Suspense A/c Dr. 90,000
To Debentures A/c 90,000

(Issue of 900, 12% Debentures of Rs. 100 each as collateral security for a bank overdraft of Rs. 80,000 as per Board’s resolution dated.....)

Balance Sheet of Z Ltd. as at.....

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity and Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Long-term borrowings</td>
<td></td>
<td>90,000</td>
</tr>
<tr>
<td>Current liability</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Short-term borrowings</td>
<td></td>
<td>90,000</td>
</tr>
<tr>
<td>Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Current Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>3</td>
<td>90,000</td>
</tr>
</tbody>
</table>

Notes to Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Long-term borrowings</td>
<td>90,000</td>
</tr>
<tr>
<td>900, 12% Debentures of Rs.100 each (Issued as collateral security as per contra)</td>
<td></td>
</tr>
<tr>
<td>2 Short-term borrowings</td>
<td>80,000</td>
</tr>
<tr>
<td>Bank Overdraft</td>
<td></td>
</tr>
<tr>
<td>(Secured by the issue of 900, 12% Debentures of Rs.100 each as collateral security)</td>
<td></td>
</tr>
<tr>
<td>3 Other non-current assets</td>
<td>90,000</td>
</tr>
<tr>
<td>Debentures Suspense Account</td>
<td></td>
</tr>
<tr>
<td>(Issued as collateral security as per contra)</td>
<td></td>
</tr>
</tbody>
</table>

DEBENTURE INTEREST

Wherever a company issues debentures it undertakes to pay interest thereon at a fixed percentage. As the debentures acknowledge a debt, the payment of interest on the debt is obligatory on the part of the company issuing them irrespective of the fact whether the company earns profit or not. Thus, interest payable on debentures is a charge against the profits of the company. Interest on debentures is normally payable half-yearly and it is calculated at the fixed percentage on the nominal value of debentures issued and not on the
issue price. Thus, the issue of debentures at par or at a premium or at a discount would not make any difference for the purpose of calculating interest on debentures.

In certain cases, the company must deduct income tax at the prescribed rate from the gross amount of interest payable on debentures and only net amount is paid to the debentureholder. It is called tax deducted at source and has to be deposited with the tax authorities.

1. **On interest becoming due**

   Debenture Interest A/c Dr. (with the gross interest due)

   To Income-tax Payable A/c or

   Tax Deducted at (with the amount of Income-tax to be

   Source A/c. deducted at source)

   To Debenture holders’ A/c (with the net amount payable after deduction of

   income-tax)

2. **On payment of interest to the debenture holders**

   Debenture holders’ A/c Dr. (with the net amount of paid interest)

   To Bank A/c

3. **On payment of income-tax to the Government**

   Income-tax Payable A/c Dr. (with the amount of income-tax deducted at

   source and deposited with the Government)

4. **On transfer of Debenture Interest to Profit and Loss Account at the end of the year**

   Profit and Loss A/c Dr. (with the gross amount of interest on debentures)

   To Debenture Interest A/c

**Illustration 7.**

M Ltd. had issued Rs. 5,00,000, 10% debentures on which interest was payable half-yearly on 30th September and 31st March. Show the necessary journal entries relating to debenture interest for the year ended 31st March, 2018 assuming that all moneys were duly paid by the company. Tax deducted at source is 10%.

**Solution:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Debit (Rs)</th>
<th>Credit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Debenture Interest A/c</td>
<td>Dr.</td>
<td>25,000</td>
</tr>
<tr>
<td>Sep,30</td>
<td>To Income-tax Payable A/c</td>
<td></td>
<td>2,500</td>
</tr>
<tr>
<td></td>
<td>To Debenture-holders A/c</td>
<td></td>
<td>22,500</td>
</tr>
<tr>
<td></td>
<td>(Interest due on Rs 5,00,000, 10% debentures for 6 months and income-tax deducted at source thereon @ 10%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep,30</td>
<td>Debenture-holders’ A/c</td>
<td>Dr.</td>
<td>22,500</td>
</tr>
<tr>
<td></td>
<td>To Bank</td>
<td></td>
<td>22,500</td>
</tr>
<tr>
<td></td>
<td>(Payment of interest to debenture-holders)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Lesson 4  Accounting for Debentures

<table>
<thead>
<tr>
<th>Date</th>
<th>Account</th>
<th>Description</th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep,30</td>
<td>Income-tax Payable A/c</td>
<td>To Bank. (Deposit of income-tax deducted at source from Debenture Interest with the Government)</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>March,31</td>
<td>Debenture Interest A/c</td>
<td>To Income-tax Payable A/c. To Debenture-holders A/c. (Interest due on Rs 5,00,000, 10% debentures for 6 months and income-tax deducted at source thereon @ 10%)</td>
<td>25,000</td>
<td>2,500 22,500</td>
</tr>
<tr>
<td>March,31</td>
<td>Debenture-holders’ A/c</td>
<td>To Bank. (Payment of interest to debenture-holders)</td>
<td>22,500</td>
<td>22,500</td>
</tr>
<tr>
<td>March,31</td>
<td>Income-tax Payable A/c</td>
<td>To Bank. (Deposit of income-tax deducted at source from Debenture Interest with the Government)</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>March,31</td>
<td>Profit and Loss A/c</td>
<td>To Debenture Interest A/c. (Transfer of Debenture Interest to Profit and Loss A/c)</td>
<td>50,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

### Interest accrued and due (outstanding interest)

Interest on debentures is paid periodically. Suppose a company pays interest on 30th September and 31st March on Rs. 5,00,000, 14% Debentures. The company will pay Rs. 35,000 in every six months. The debenture-holders cannot demand interest before these specified due dates. Assuming that the accounting period ends on 31st March and the interest from 1st October to 31st March remains unpaid. In that case the debenture interest is accrued and due and it is technically termed as outstanding interest and will be recorded as under:

- **Debenture Interest A/c** Dr 35,000
- **To outstanding debenture interest A/c** 35,000

The liability of outstanding debenture interest will be shown as “other current liability” in Balance sheet.

### Interest accrued but not due (accrued interest)

While preparing final accounts, interest upto closing date must be taken into account, though the same is simply accrued but not payable.

For example, if the debenture interest is paid on 30th June and 31st December and the company closes its books on 31st March. After the payment of interest on 31st December, the next payment will be made on 30th June in next accounting period. But for proper accounting, interest from 1st January to 31st March must be accounted for. It is called interest accrued but not due or simply accrued interest and will be recorded as:
Debenture interest A/c Dr
To Accrued debenture interest A/c

Accrued debenture interest will be shown as “other current liability” in Balance sheet.

**Accounting entries for issue of debentures (based on conditions of redemption)**

A company may issue debentures on certain terms as to their issue price at par or a premium or discount and as to their redemption which can be either at par or at premium.

**i) Issued at par and redeemable at par:**

Bank Dr. (with the nominal value of debentures)
To Debentures Account

**ii) Issued at discount and redeemable at par:**

Bank Dr. (with the amount received)
Discount on Issue of Debentures Account Dr. (with the amount of discount)
To Debentures Account (with the nominal value)

**iii) Issued at premium and redeemable at par:**

Bank Account Dr. (with the amount received)
To Debentures Account (with the nominal value)
To Securities Premium Account (with the amount of premium)

**iv) Issued at par and redeemable at premium:**

Bank Account Dr. (with the amount received)
Loss on issue of Debentures Account Dr. (with the amount of premium on redemption)
To Debentures Account (with the nominal value)
To Premium on Redemption of Debentures Account (with the premium on redemption)

**v) Issued at discount, and redeemable at premium**

Bank Account Dr. (with the amount received)
Discount on Issue of Debentures Account Dr. (with the discount allowed on issue)
Loss on Issue of Debentures Account Dr. (with the premium payable on redemption)
To Debentures Account (with the nominal value)
To Premium on Redemption of Debentures Account (with the premium on redemption)

**Note:**
(i) Premium on Redemption of Debentures Account is shown as liabilities side of the balance sheet.
(ii) Loss on Issue of Debentures Account is written off gradually every year during the life of the debentures. The unwritten off amount is shown in the balance sheet under ‘Other Current or other Non-Current Asset’.
(iii) Premium on Redemption of Debentures Account is transferred to debentureholders account at the time of redemption.
**Illustration 8.**

Journalize the following transactions.

Issue of 12%, 1,00,000 debentures of Rs. 100 each

1. at par and redeemable at par.
2. at 10% discount and redeemable at par.
3. at 10% premium and redeemable at par.
4. at 10% premium and redeemable at a premium of 5%.
5. at par and redeemable at a premium of 5%.
6. at 10% discount and redeemable at a premium of 5%.

**Solution:** Journal entries (in ‘000)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Particulars</th>
<th>Debit(Rs.)</th>
<th>Credit(Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Bank Account</td>
<td>Dr. 10,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures Account</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>(Being 12% Debentures issued at par)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii)</td>
<td>Bank Account</td>
<td>Dr. 9,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discount on Issue of Debentures Account</td>
<td>Dr. 1,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures Account</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>(Being 12% Debentures issued at 10% discount)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iii)</td>
<td>Bank Account</td>
<td>Dr. 11,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures Account</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>To Securities Premium Account</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>(Being 12% Debentures issued at 10% premium)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iv)</td>
<td>Bank Account</td>
<td>Dr. 11,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loss on issue of debenture</td>
<td>Dr. 500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To 12% Debentures Account</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>To Securities Premium Account</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>To Premium on redemption of Debentures</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>(Being 12% Debentures issued at 10% premium and redeemed at 5% premium)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TREATMENT OF DISCOUNT/LOSS ON THE ISSUE OF DEBENTURES**

The discount/loss on debentures is in the nature of capital loss and therefore the same must be written off over the life time of debentures. The entire amount of discount or loss on issue of debenture cannot be written off in the year of issue since the benefit of debenture capital will continue till the redemption of debentures takes place. However, the following alternatives are available to write off discount/loss on issue of debentures.

1. Discount on issue of debentures being a capital loss can be written off against capital profits.

2. Discount on issue of debentures can be treated as deferred revenue expenditure and written off against revenue over the period of life of the debentures.

In case there is no capital profit and it is decided to treat discount on the issue of debentures as deferred revenue expenditure, it is desirable to write it off against revenue over the period of life of the debentures on an equitable basis. The following are the two methods which are generally adopted for this purpose.

**(a) Fixed Instalment Method**

Where the debentures are redeemable at the end of specific period, the total amount of discount should be written off by equal instalments of fixed amount over that period.

**(b) Fluctuating Instalment Method**

If the debentures are to be repaid by annual drawings or instalments it would be equitable in such a case to write off discount in proportion to unpaid amount of debentures.

**Illustration 9.**

Bee Ltd. issued 2,000, 12% Debentures of Rs.100 each at a discount of 6% on 01.04.2009 repayable by equal annual drawings in four years.

You are required to show the discount on Issue of Debentures Account over the period.
Solution:

Total amount of discount on issue of debentures:
= Rs. 2,00,000 x 6/100 = Rs. 12,000

This total discount of Rs. 12,000 has to be written off in proportion to the debentures outstanding at the beginning of each year. Thus, outstanding balance ratio will be as follows:

1.4.2009 = Rs. 2,00,000
1.4.2010 = Rs. (2,00,000 - 50,000) = Rs.1,50,000
1.4.2011 = Rs. (1,50,000 - 50,000) = Rs. 1,00,000
1.4.2012 = Rs. (1,00,000 - 50,000) = Rs.50,000

Outstanding balance ratio = 2,00,000 : 1,50,000 : 1,00,000 : 50,000
= 4 : 3 : 2 : 1

Therefore, amount of discount to be written off every year will be as follows:

Rs.
31.3.2010 = 12,000 x 4/10 = 4,800
31.3.2011 = 12,000 x 3/10 = 3,600
31.3.2012 = 12,000 x 2/10 = 2,400
31.3.2013 = 12,000 x 1/10 = 1,200
Total 12,000

REDEMPTION OF DEBENTURES

MEANING
Redemption of debentures means repayment of loan due on debentures to the debentureholders. The terms and conditions of redemption are generally given in the prospectus. But irredeemable debentures are perpetual in nature and are redeemable on the happening of a contingency and not otherwise.

METHODS OF REDEMPTION
Redeemable debentures are redeemed either at par or at a premium and following methods of redemption are available to the company to discharge its liability.

Methods of Redemption

- In Lump Sum
- By Means of Annual Instalments or by Draw of Lots
- By Conversion in to Shares
- By Purchase of its own Debentures in the Open Market
  - As Investment in own Debentures
  - For Immediate Cancellation
(1) **Lumpsum**

The redemption is made in one lumpsum at the expiry of a specified period promised as the redemption date when the debentures were issued.

(2) **Annual Instalments or Draw by Lots**

Under this method, a certain amount of debentures is redeemed at regular intervals, say yearly, during the life of debentures. The amount of annual drawings may or may not be equal.

(3) **Conversion Into Shares**

A company may issue convertible debentures, giving options to the debentureholders to exchange their debentures for equity shares or preference shares in the company.

(4) **Purchase of Its Own Debentures In Open Market**

A company is entitled to purchase its own debentures in open market, i.e., through the stock exchange. When the company purchases its own debentures for immediate cancellation, it leads to automatic redemption. Own debentures may also be purchased by the company for its own investment and same may be reissued in future too.

### Sources of Redemption

A company can arrange funds from the following sources

(a) Out of capital
(b) Out of profit
(c) Through conversion

### Redemption Out of Capital

When debentures are redeemed out of capital, no debenture redemption reserve is created out of profit of the company. Thus, the profit would not be reduced and the same can be utilized in future for the payment of dividend.

A. **When debentures are redeemed at par**

(i) On debentures becoming due for payment

Debentures A/c Dr (with the nominal value of debentures)

To Debentureholders A/c

(ii) On redemption

Debentureholders A/c Dr

To Bank A/c

B. **When debentures are redeemed at premium**

(i) On debentures becoming due for payment

Debentures A/c Dr (with the nominal value of debentures)

Premium on redemption Dr (with the amount of premium)

Of Debentures A/c Dr

To Debentureholders A/c
(ii) On redemption
Debentureholders A/c Dr
To Bank A/c

(iii) On writing off premium on redemption since it was not recorded at the time of issue of debentures
Securities Premium A/c Dr
Free reserves A/c Dr
To Premium on redemption of debentures A/c

C. When debentures are redeemed at discount
Although it's a very rare possibility, the accounting treatment would be
(i) On debentures becoming due for payment
Debentures A/c Dr (with the nominal value of debentures)
To Debentureholders A/c (with the mount payable)
To Capital Reserve A/c (with the amount of discount)

(ii) On redemption
Debentureholders A/c Dr
To Bank A/c

Illustration 10.
Amritsar Ltd. issued Rs 5 Crores 10% debentures of Rs. 1000 each at Rs. 940. The debentures are redeemable in five annual instalments.
Pass appropriate entries in year 1 and 2

Solution:

Amritsar Ltd.
Journal Entries

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td>Discount on issue of Debentures A/c</td>
<td>Dr</td>
<td>4,70,00,000</td>
</tr>
<tr>
<td>To 10% Debentures A/c</td>
<td>Dr</td>
<td>30,00,000</td>
</tr>
<tr>
<td>(Being issue of 50,000, 10% debentures of Rs 1000 each at Rs. 940)</td>
<td></td>
<td>5,00,00,000</td>
</tr>
<tr>
<td>(ii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debenture interest A/c</td>
<td>Dr</td>
<td>50,00,000</td>
</tr>
<tr>
<td>To Bank A/c</td>
<td></td>
<td>50,00,000</td>
</tr>
<tr>
<td>(Being payment of interest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>Dr</td>
<td>60,00,000</td>
</tr>
<tr>
<td>To Debenture interest A/c</td>
<td></td>
<td>50,00,000</td>
</tr>
<tr>
<td>To discount on issue of Debenture A/c</td>
<td></td>
<td>10,00,000</td>
</tr>
</tbody>
</table>
### Debenture Redemption Reserve (DRR)

Section 71(4) of the Companies Act, 2013 provides that the debentures shall be redeemed out of divisible profits of the company through the creation of Debenture Redemption Reserve in accordance with the conditions given below:

(i) Debenture Redemption Reserve is created out of profits of the company available for payment of dividend.

(ii) The company (including manufacturing and infrastructure) shall create DRR equivalent to at least 50% of the amount raised through the debentures issue before debenture redemption begins.

For unlisted companies issuing debentures on private placement basis, the DRR will be 25% of the value of debentures.

(iii) Every company is required to create DRR shall on or before the 30th day of April in each year invest or deposit, as the case may be, a sum which shall not be less than 15% of the amount of its debentures maturing during the year ending on 31st day of March of next year in any one or more of the following methods, namely:

(a) In deposits with any scheduled banks free of any charge or lieu.

(b) In unencumbered securities of the Central Government or of any State Government.

(c) In unencumbered securities mentioned in sub-clauses (a) to (d) and (e) of Section 20 of Indian Trusts Act, 1882.

(d) In unencumbered bonds issued by any other company which is notified under sub-clause (f) of Section 20 of Indian Trusts Act, 1882.

(iv) The mount invested or deposited as stated above shall be used only for the redemption of the debentures maturing during the year.

(v) The amount remaining invested or deposited as the case may be, shall not, at any time, fall below 15% of the amount of debentures maturing during the year ending on 31st March of every year.

(vi) In case of partly convertible debentures, DRR shall be created in respect of non-convertible portion of debentures issue in accordance with subrule.

(vii) The amount credited to DRR shall not be utilized by the company except for the purpose of redemption of debentures.

(viii) No DRR is required for debentures issued by All India Financial Institutions (AIFIs) regulated by Reserve Bank of India (RBI) and Banking companies for both public as well as privately placed debentures.

(ix) For other financial institutions within the meaning of Section 2(72) of the Companies Act, 2013, DRR will be applicable as applicable to NBFCs registered with RBI.

(x) For Non-Banking Financial Companies registered with the RBI under Section 45-IA of the

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Account</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>10% Debenture A/c</td>
<td></td>
<td>Dr</td>
</tr>
<tr>
<td></td>
<td>Dr</td>
<td></td>
<td>1,00,00,000</td>
</tr>
<tr>
<td></td>
<td>Debenture interest A/c</td>
<td></td>
<td>Dr</td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
<td>40,00,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii)</td>
<td>Profit &amp; Loss A/c</td>
<td>Dr</td>
<td>48,00,000</td>
</tr>
<tr>
<td></td>
<td>To Debenture interest A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To discount on issue of Debentures A/c</td>
<td></td>
<td>8,00,000</td>
</tr>
</tbody>
</table>
RBI(Amendment) Act 1997, the adequacy of DRR will be 25% of the value of debentures issued through public issue as per SEBI Regulations, 2008 and no DRR is required in case of privately placed debentures.

**Accounting Treatment**

For appropriation of surplus or withholding of profits in the form of DRR

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td>To DRR A/c</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DRR would be shown or disclosed as Shareholder’s Funds on the Balance Sheet under the heading: Reserves and Surplus.

On transferring the balance of DRR when the debentures are redeemed

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRR A/c</td>
<td>Dr</td>
<td></td>
</tr>
<tr>
<td>To General Reserve A/c</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Illustration 11.**

Jai Bhagwan Ltd has a balance of Rs. 4,00,000 in the Profit & Loss Statement. The company decided to forego the payment of dividend and utilize the profits to repay 12%, Rs. 3,50,000 debentures on 30th June 2018 at a premium of 10%. Debenture interest is paid annually on 31st December every year when the accounts are closed. The company has a balance of Rs. 2,00,000 in DRR.

Journalize and ignore narration.

**Solution:**

<table>
<thead>
<tr>
<th>Jai Bhagwan Ltd.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Journal Entries</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debenture interest A/c</td>
<td>Dr</td>
<td>21,000</td>
</tr>
<tr>
<td>To Bank A/c</td>
<td></td>
<td>21,000</td>
</tr>
<tr>
<td>12% Debentures A/c</td>
<td>Dr</td>
<td>3,50,000</td>
</tr>
<tr>
<td>Premium on redemption of Debentures A/c</td>
<td>Dr</td>
<td>35,000</td>
</tr>
<tr>
<td>To Debentureholders A/c</td>
<td></td>
<td>3,85,000</td>
</tr>
<tr>
<td>Surplus A/c</td>
<td>Dr</td>
<td>1,50,000</td>
</tr>
<tr>
<td>To DRR A/c</td>
<td></td>
<td>1,50,000</td>
</tr>
<tr>
<td>Debentureholders A/c</td>
<td>Dr</td>
<td>3,85,000</td>
</tr>
<tr>
<td>To Bank A/c</td>
<td></td>
<td>3,85,000</td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>Dr</td>
<td>35,000</td>
</tr>
<tr>
<td>To Premium on redemption of Debentures A/c</td>
<td></td>
<td>35,000</td>
</tr>
</tbody>
</table>

**Sinking Fund Method (Debenture Redemption Fund Method)**

A sinking fund may be defined as a fund created by an appropriation of certain profits and investments of the same for the redemption of debentures. The investment may be in the form of Government Bonds or other quickly saleable securities so that the same can be sold without much difficulty.
Types of Sinking Funds

(i) Cumulative Sinking Fund
(ii) Non- Cumulative Sinking Fund

Cumulative Sinking Fund

A cumulative sinking fund is maintained on the basis of annual appropriation of the profits plus the interest earned on the sinking fund investments.

The accounting entries for maintaining a cumulative sinking fund are as follows:

A. At the end of First year
   (i) For appropriation of required amount for Sinking Fund
       Surplus A/c         Dr
       To Sinking Fund A/c
   (ii) For investing the surplus appropriated
        Sinking fund investment A/c         Dr
       To Bank A/c

B. At the end of second and subsequent years
   (i) For receiving interest on Sinking Fund Investment
       Bank A/c         Dr
       To interest on Sinking Fund Investment A/c
   (ii) For transferring interest to Sinking Fund Account
        Interest on sinking fund investment A/c         Dr
       To Sinking Fund A/c
   (iii) For annual appropriation
        Surplus A/c         Dr
       To Sinking Fund A/c
   (iv) For investing the surplus appropriated and the interest received
        Sinking Fund Investment A/c         Dr
       To Bank A/c

C. At the end of Last Year
   (i) For receiving interest on Sinking Fund Investment
       Bank A/c         Dr
       To Sinking Fund A/c
   (ii) For annual appropriation
        Surplus A/c         Dr
       To Sinking Fund A/c
(iii) For sale of Sinking Fund Investment
   (a) In case of profit
   Bank A/c Dr
   To Sinking Fund Investment A/c
   To Sinking Fund A/c (with the amount of profit)
   (b) In case of loss
   Bank A/c Dr
   Sinking Fund A/c Dr (with the amount of loss)
   To Sinking Fund Investment A/c
(iv) For redemption of debentures
   (a) At par
   Debentures A/c Dr
   To Bank A/c
   (b) At premium
   Debentures A/c Dr
   Premium on Redemption of Debentures A/c Dr
   To Bank A/c
(v) For closing the Sinking Fund Account
   Sinking Fund A/c Dr
   To General Reserve A/c

Illustration 12.

Prakash Ltd. issued Rs. 10,00,000, 10% debentures on January 1, 2016. These were to be redeemed on 31st December, 2018. For this purpose the company established Sinking Fund. Investments were expected to earn 5% interest p.a. Sinking Fund table shows that 0.317208 invested annually at 5% amount to Rs. 1 in 3 years. On 31st December, 2018 the investment was sold for Rs. 6,56,000. Interest received and investments are made in multiples of Rs. 100. Journalize and ignore narration and debenture interest.

Solution:

Calculation of annual appropriation = Rs. 10,00,000 x 0.317208 = Rs. 3,17,208

Prakash Ltd.

Journal Entries

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs)</th>
<th>Credit (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Bank A/c</td>
<td>Dr</td>
<td>10,00,000</td>
</tr>
<tr>
<td>Jan 1 To 10% Debentures A/c</td>
<td></td>
<td>10,00,000</td>
</tr>
<tr>
<td>Date</td>
<td>Account</td>
<td>Debit</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>2017 Dec 31</td>
<td>Surplus A/c</td>
<td>Dr 3,17,208</td>
</tr>
<tr>
<td></td>
<td>To Sinking Fund A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sinking Fund Investment A/c</td>
<td>Dr 3,17,208</td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
</tr>
<tr>
<td>2018 Dec 31</td>
<td>Bank A/c</td>
<td>Dr 15,860</td>
</tr>
<tr>
<td></td>
<td>To Sinking Fund A/c</td>
<td></td>
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<tr>
<td></td>
<td>Surplus A/c</td>
<td>Dr 3,17,208</td>
</tr>
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<td></td>
<td>To Sinking Fund A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sinking Fund Investment A/c</td>
<td>Dr 3,33,100</td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
</tr>
<tr>
<td>2018 Dec 31</td>
<td>Bank A/c</td>
<td>Dr 32,515</td>
</tr>
<tr>
<td></td>
<td>To Sinking Fund A/c</td>
<td></td>
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<tr>
<td></td>
<td>Surplus A/c</td>
<td>Dr 3,17,2018</td>
</tr>
<tr>
<td></td>
<td>To Sinking Fund A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bank A/c</td>
<td>Dr 6,56,000</td>
</tr>
<tr>
<td></td>
<td>To Sinking Fund Investment A/c</td>
<td>6,50,300</td>
</tr>
<tr>
<td></td>
<td>To Sinking Fund A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10% Debentures A/c</td>
<td>Dr 10,00,000</td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sinking Fund A/c</td>
<td>Dr 10,00,000</td>
</tr>
<tr>
<td></td>
<td>To General Reserve A/c</td>
<td></td>
</tr>
</tbody>
</table>

**Non-Cumulative Sinking Fund**

If the sinking fund is non-cumulative, the interest received on Sinking Fund Investment is not invested and not credited to Sinking Fund A/c. The amount of interest is credited to Profit & Loss statement.

**Illustration 13.**

The following balances appeared in the books of a company as on December 31, 2014:

- 6% Mortgage 10,000 debentures of Rs.100 each; Debenture Redemption Reserve (for redemption of debentures) Rs.10, 42,000;
- Investment Rs.5,28,000, 4% Government Loan purchased at par and 5,60,000,
- 3-1/2% Government paper purchased for Rs. 5,42,000.

The interest on debentures had been paid up to December 31, 2010. On February 28, 2015, the investments were sold at Rs. 90 and Rs. 87 respectively, and the debentures were paid off at 101 together with accrued interest.

Write the ledger accounts concerned. The Debenture Redemption Reserve is non-cumulative.
Solution:

### 6% Mortgage Debentures Account

<table>
<thead>
<tr>
<th></th>
<th>Feb 28</th>
<th>To Debenture holders A/c</th>
<th>Jan 1</th>
<th>By Balance b/d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10,00,000</td>
<td></td>
<td>10,00,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10,00,000</td>
<td></td>
<td>10,00,000</td>
</tr>
</tbody>
</table>

### Premium on Redemption of Debentures Account

<table>
<thead>
<tr>
<th></th>
<th>To Debenture holders A/c</th>
<th>Jan 1</th>
<th>By Debenture Redemption Reserve. A/c</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10,000</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>10,000</td>
<td></td>
<td>10,000</td>
</tr>
</tbody>
</table>

### Debentures Redemption Fund Investment Account

<table>
<thead>
<tr>
<th></th>
<th>To Balance b/d</th>
<th>By Bank (Rs. 5,28,000 Govt. Loan @ Rs. 90)</th>
<th>4,75,200</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10,70,000</td>
<td>By Bank (Rs. 5,60,000 Govt. Paper @ Rs. 87)</td>
<td>4,87,200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By D.R.R. (Loss)</td>
<td>1,07,600</td>
</tr>
</tbody>
</table>

|       | 10,70,000      | 10,70,000                                 |

### Debentures Redemption Fund Account

<table>
<thead>
<tr>
<th></th>
<th>To Premium on Redemption</th>
<th>By Balance b/d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10,000</td>
<td>10,42,000</td>
</tr>
<tr>
<td></td>
<td>To DRR investment A/c</td>
<td>1,07,600</td>
</tr>
<tr>
<td></td>
<td>10,000,000</td>
<td>75,600</td>
</tr>
<tr>
<td></td>
<td>To General Reserve</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11,17,600</td>
<td>11,17,600</td>
</tr>
</tbody>
</table>

#### Insurance Policy Method

Under this method also, annual sum is appropriated out of surplus and credited to Debenture Redemption Fund A/c in the same manner as it is done in Sinking Fund method. However, the appropriate profit is not invested in marketable securities, instead an insurance policy is taken for the required amount and an amount equal to profit set aside is paid as premium to insurance company. At the end of policy period, the insurance company returns the total accumulated amount which is sufficient to pay the debentureholders.

#### Accounting Treatment

A. From year to year
   (i) On payment of premium
       Debenture Redemption Fund Policy A/c Dr (with the annual premium amount)
       To Bank A/c
   (ii) For appropriation of profit equivalent to amount of premium paid during the year
       Surplus A/c Dr
       To Debenture Redemption Fund A/c
B. At the time of maturity and redemption
   (i) On realization of policy
       Bank A/c Dr   (with the amount of policy)
       To Debenture Redemption Fund
       Policy A/c
   (ii) On transfer of interest earned on premium
       Debenture Redemption Fund Policy A/c Dr   (with the difference between the amount of
       To Debenture Redemption Fund A/c policy realized and the total premium paid)
   (iii) On transfer of premium on redemption of debentures
       Debenture Redemption Fund A/c Dr
       To Premium on redemption
   (iv) For closing the Debenture Redemption Fund Account
       Debenture Redemption Fund A/c Dr
       To General Reserve A/c

Illustration 14.
Go Ltd. issued 500, 12% Debentures of Rs. 100 each at par on 1st April, 2011, repayable at par after 3 years
on 31st March, 2014. The directors decided to take out an insurance policy to provide necessary cash for
the redemption of the debentures. The annual premium for the policy payable on 1st April every year was
Rs. 15,705.

You are required to show the journal entries in the books of the company.

Solution:

Go Ltd.

Journal Entries

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 April 1 Bank</td>
<td>Dr.</td>
<td>50,000</td>
</tr>
<tr>
<td>2011 April 1 To 12% Debentures A/c</td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>(Allotment of 500 12% Debenture of Rs 100 each as per Board’s resolution dated....)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012 March 31 Profit and Loss Appropriation A/c</td>
<td>Dr.</td>
<td>15,705</td>
</tr>
<tr>
<td>2012 March 31 To Debenture Redemption Fund A/c</td>
<td></td>
<td>15,705</td>
</tr>
<tr>
<td>(Transfer of profit to Debenture Redemption Fund Account)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Account Description</td>
<td>Dr.</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>April 1</td>
<td>Debenture Redemption Fund Policy A/c Dr. To Bank (Payment of annual premium)</td>
<td>15,705</td>
</tr>
<tr>
<td>2013</td>
<td>Profit and Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c</td>
<td>15,705</td>
</tr>
<tr>
<td>March 31</td>
<td>(Transfer of profit to Debenture Redemption Fund Account)</td>
<td></td>
</tr>
<tr>
<td>April 1</td>
<td>Debenture Redemption Fund Policy A/c Dr. To Bank (Payment of annual premium)</td>
<td>15,705</td>
</tr>
<tr>
<td>2014</td>
<td>Profit and Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c</td>
<td>15,705</td>
</tr>
<tr>
<td>March 31</td>
<td>(Transfer of profit to Debenture Redemption Fund Account)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bank Dr. To Debenture Redemption Fund Policy A/c (Receipt of policy amount)</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Debenture Redemption Fund Policy A/c Dr. To Debenture Redemption Fund A/c (Transfer of accumulated interest)</td>
<td>2,885</td>
</tr>
<tr>
<td></td>
<td>12% Debentures A/c Dr. To Debentureholders A/c (Amount due on redemption)</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Debentureholders A/c Dr. To Bank (Payment made for the amount due)</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Debenture Redemption Fund A/c Dr. To General Reserve A/c (Transfer of balance)</td>
<td>50,000</td>
</tr>
</tbody>
</table>

**REDEMPTION BY CONVERSION**

A company can issue convertible debentures. It means that the debentures would be converted into new class of debentures or shares.
Accounting Treatment

(a) When shares are issued at par
   Debit: Debentures A/c  
   Credit: Share capital A/c

(b) When shares are issued at a premium
   Debit: Debentures A/c  
   Credit: Share Capital A/c (with the nominal value of shares issued)  
   Credit: Securities Premium A/c (with the amount of premium)

Illustration 15.

Bima Ltd. had issued 11% 5,00,000 debentures of Rs. 100 each redeemable on 31st March 2018 at a premium of 5%.

The company offered three options to debentureholders as under:

(i) 13% Preference shares of Rs.10 each at Rs.10.50
(ii) 14% debentures of Rs. 100 at par.
(iii) Redemption in cash.

The options were accepted as under:

Option (i) by holders of 1,00,000 debentures.
Option (ii) by holders of 1,00,000 debentures.
Option (iii) by holders of 3,00,000 debentures.

The company carried out the redemption. Pass the necessary journal entries.

Solution:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11% Debentures A/c</td>
<td>Dr.</td>
<td>500</td>
</tr>
<tr>
<td>Premium on redemption of Debentures A/c</td>
<td>Dr.</td>
<td>25</td>
</tr>
<tr>
<td>To Debentureholder A/c</td>
<td></td>
<td>525</td>
</tr>
<tr>
<td>(Being redemption due at premium@ 5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debentureholders account</td>
<td>Dr.</td>
<td>105</td>
</tr>
<tr>
<td>To 13% Preference Share Capital Account</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>To Securities premium account</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>(Being debentures converted into preference shares)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debentureholders A/c</td>
<td>Dr.</td>
<td>105</td>
</tr>
<tr>
<td>To 14% Debenture A/c</td>
<td></td>
<td>105</td>
</tr>
<tr>
<td>(Being debentures converted into 14% debentures)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lesson 4  Accounting for Debentures

Debentureholders A/c

To Bank A/c

(Being payment made to remaining debentureholders)

315

Purchase of Debentures in the Open Market

A company, if authorized by its Articles of Association, can buy its own debentures in the open market. The debentures so purchased can be used either for immediate cancellation or redemption of debentures or for investment. The debentures so purchased for investment can subsequently either be reissued when the company requires additional cash or be cancelled if the company so desires. Debentures when purchased for investment are popularly known as “Own Debentures”. This can be categorized as follows:

1. **For immediate cancellation**
   
   When the company cancels the debentures so purchased, it amounts to redemption of debentures. It means after cancellation, redemption is automatic and these debentures cannot be reissued.

2. **For investment in the form of own debentures**
   
   If the company purchases its debentures from open market and holds them for sometime before cancellation, such debentures are known as own debentures. Own debentures are held by company as investment and may be resold till cancellation. After cancellation, the debentures are said to be redeemed and cannot be resold.

Accounting treatment for immediate cancellation of debentures

(a) **Where no Sinking Fund exists**

(1) On purchase and cancellation of debentures -

Debentures A/c  Dr.  (with the amount paid)

To Bank

Notes: 1. If there is any difference between the nominal value of the debentures cancelled and the price paid for them, the same has to be treated as profit or loss on cancellation, and should be credited or debited to Profit on Redemption of Debentures Account or Loss on Redemption of Debentures Account.

Thus, the entry for this will be as follows:

In case of profit -

Debentures A/c  Dr.  (with the nominal value of debentures cancelled)

To Bank (with the price paid for them)

To Profit on Redemption of Debentures A/c  (with the profit, if any).

In case of loss -

Debentures A/c  Dr.  (with the nominal value of debentures cancelled)

Loss on Redemption of Debentures A/c  Dr.  (with the loss, if any)

To Bank A/c (with the total)

Such profit or loss, being of capital nature, should be transferred to Capital Reserve Account (if profit) or written off against the Profit and Loss Account or Capital Profit including Securities Premium Account (if loss). The entry for this will be as follows:
In case of profit -

Profit on Redemption of Debentures A/c Dr.
To Capital Reserve A/c

In case of loss -

Profit and Loss A/c Dr.
Or, Capital Reserve A/c (if any) Dr.
Or, Securities Premium A/c (if any) Dr.

To Loss on Redemption of Debenture A/c

2. On transfer of profits which would otherwise be available for dividend to Debenture Redemption Reserve -

Profit and Loss Appropriation A/c Dr. (with the nominal value of debentures cancelled)
To Debenture Redemption Reserve A/c

(b) Where Sinking Fund Exists –

1. On Sale of Sinking Fund Investments -

Bank Dr. (with the realisation value)
To Debenture Redemption Fund Investment A/c

Note: If there is any profit or loss on sale of investments, the same has to be transferred to Debenture Redemption Fund Account.

2. On purchase and cancellation of debentures -

Debentures A/c Dr. (with the amount paid)
To Bank

3. Profit or loss on cancellation or redemption of debentures shall be transferred to Sinking Fund or Debenture Redemption Fund Account. The accounting entries:

**In case of profit:**

Debentures A/c Dr. (with the nominal value)
To Bank (with the price paid)
To Profit on Redemption Debentures A/c (with the amount of profit)

**In case of loss:**

Debentures A/c Dr. (with the nominal value)
Loss on Cancellation or Redemption of Debentures A/c Dr. (with the loss on cancellation)
To Bank (with the amount paid)
Sinking Fund A/c Dr.
To Loss on Cancellation or Redemption of Debentures A/c

4. On transfer of the nominal value of the debentures cancelled to General Reserve Account from the Debenture Redemption Fund Account –

Debenture Redemption Fund A/c Dr. (with the nominal value of the debentures cancelled)

To General Reserve A/c

**Purchase of Debentures as Investment (Own Debentures)**

The accounting entries in such a case will be as follows:

(a) Where no Sinking Fund Exists:

On purchase of debentures as investment –

Own Debentures A/c Dr.

Or Investment in Own Debentures A/c Dr. (with the amount paid for the debentures)

To Bank

(b) Where Sinking Fund Exists:

On sale of investments -

Bank Dr (with the realised amount)

To Debenture Redemption Fund Investment A/c

**Note:** If there is any profit or loss on sale of investments the same has to be transferred to Debenture Redemption Fund Account.

On purchase of debentures as investment -

Bank Dr. (With the amount received)

Wwn Debentures A/c Dr.

Or Investment in Own Debentures A/c Dr. (with the amount paid for the debentures)

To Bank

**Cancellation of Own Debentures**

When own debentures are subsequently cancelled -

Bank Dr. (With the amount received)

Debentures A/c Dr. (with the nominal value of the debentures cancelled)

To Own Debentures A/c

Or

To Investment in Own Debentures A/c

In case of profit -

Debentures A/c Dr. (nominal value of the debentures cancelled)
To Own Debentures A/c
(book value of the Own Debentures cancelled)

To Profit on Redemption of Debentures A/c

**In case of loss** –

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debentures A/c</td>
<td>Dr.</td>
</tr>
<tr>
<td>Loss on Redemption of Debentures A/c</td>
<td>Dr.</td>
</tr>
</tbody>
</table>

To Own Debenture A/c
(book value of the Own Debentures cancelled)

(2) If Sinking Fund exists, the accounts of profit on redemption of debentures or loss on redemption of debentures should be transferred to Debenture Redemption Fund Account.

(3) If no Sinking Fund exists it is desirable that an amount equal to the nominal value of the debentures cancelled should be transferred to Debenture Redemption Reserve Account out of the profit of the company on cancellation.

(4) If Sinking Fund exists, on cancellation, an amount equal to the nominal value of the debentures cancelled should be transferred to General Reserve from the Debenture Redemption Fund Account.

**PURCHASE OF DEBENTURES BEFORE THE SPECIFIED DATE OF PAYMENT OF INTEREST [CUM-INTEREST AND EX-INTEREST QUOTATIONS]**

Interest on debentures is generally paid half yearly to the holders on certain specified dates, e.g., 30th September and 31st March every year. If debentures are purchased exactly on these specified dates, it involves no problem. In such a case, interest is payable to the holders of debentures. But, where debentures are purchased at a date before the specified date of payment of interest the question which naturally arises is whether the price paid for such debentures includes the interest for the expired period (i.e., from the previous date of payment of interest up to the date of purchase) or not.

For this purpose it is important to note whether the price paid for the debentures is quoted as “Cum-interest” or “Ex-interest”. If the purchase price for the debentures includes interest for the expired period, the quotation is said to be “Cum-interest”. If, on the other hand, the purchase price for the debentures excludes the interest for the expired period, the quotation is said to be “Ex-interest”. In case of Ex-interest quotation, interest has to be paid to the holders for the expired period in addition to the price paid for the debentures. In any case, the company must pay interest for the expired period and while making entry in its books at the time of purchase of the debentures, the amount paid by way of interest should be treated separately from the price actually paid for the debentures.

**Illustration 16. (Purchase of debentures for immediate cancellation)**

XYZ Ltd. has 5000, 10% debentures of Rs.100 each. The interest on these debentures is paid half yearly on June 30, December 31 every year. The company is not maintaining any sinking fund. On 01-04-2017, the company purchased 500 debentures at Rs. 95 each cum – interest for immediate cancellation. On 01-10-2017, the company purchased 600 debentures at Rs. 90 each ex-interest for immediate cancellation. Journalize.
**Solution:**

**XYZ Ltd.**

**Journal Entries**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 April 1</td>
<td>10% Debentures A/c Dr</td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debenture Interest A/c Dr</td>
<td>1250</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
<td>47,500</td>
</tr>
<tr>
<td></td>
<td>To Profit on cancellation of debentures A/c</td>
<td></td>
<td>3750</td>
</tr>
<tr>
<td></td>
<td>(Purchase of debentures-cum-interest for immediate cancellation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 30</td>
<td>Debenture Interest A/c Dr</td>
<td>22,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
<td>22,500</td>
</tr>
<tr>
<td></td>
<td>(Payment of interest on Rs 4,50,000 debentures for six months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 1</td>
<td>10% Debentures A/c Dr</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debenture Interest A/c Dr</td>
<td>1500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
<td>55,500</td>
</tr>
<tr>
<td></td>
<td>To Profit on cancellation of debentures A/c</td>
<td></td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td>(Purchase of debentures ex-interest for immediate cancellation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 31</td>
<td>Debenture Interest A/c Dr</td>
<td>19,500</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Bank A/c</td>
<td></td>
<td>19,500</td>
</tr>
<tr>
<td></td>
<td>(payment of interest on Rs 3,90,000 debentures for six months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>December 31</td>
<td>Profit &amp; Loss A/c Dr</td>
<td>44,750</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Debenture interest A/c</td>
<td></td>
<td>44,750</td>
</tr>
<tr>
<td></td>
<td>(Transfer of debenture interest to P&amp;L A/c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profit on cancellation of Debentures A/c Dr</td>
<td>9750</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Capital Reserve A/c</td>
<td></td>
<td>9750</td>
</tr>
<tr>
<td></td>
<td>(Profit on cancellation transferred to Capital Reserve)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surplus A/c</td>
<td>1,10,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Debenture Redemption Reserve A/c</td>
<td></td>
<td>1,10,000</td>
</tr>
<tr>
<td></td>
<td>(Transfer to DRR)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Illustration 17. (Purchase of Own Debentures as investment)**

Sugandha Ltd. issued 10,000 12% Debentures of Rs. 100 each on 1st April, 2016. Interest is payable on 30th September and 31st March every year. On 1st July, 2017, the company purchased 1,000 of its Own Debentures at Rs. 96 ex-interest as investments. On 1st January, 2018, the company purchased 2000 of its Own Debentures at Rs. 96 cum interest as investment. On 31st March 2018, the company cancelled all of its Own Debentures and books closes on 31st March every year. Journalize.
**Solution:**

**Sugandha Ltd.**

**Journal Entries**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Debit (Rs.)</th>
<th>Credit (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 April 1</td>
<td>Bank A/c To 12% Debentures A/c (Being issued 10,000, 12% debentures of Rs 100 each)</td>
<td>10,00,000</td>
<td>10,00,000</td>
</tr>
<tr>
<td>September 30</td>
<td>Debenture Interest A/c To Bank A/c (being paid interest on debentures for six months)</td>
<td>60,000</td>
<td>60,000</td>
</tr>
<tr>
<td>2017 March 31</td>
<td>Debenture Interest A/c To Bank A/c (Being interest paid on debentures for six months)</td>
<td>60,000</td>
<td>60,000</td>
</tr>
<tr>
<td>March 31</td>
<td>Profit &amp; Loss A/c To Debenture interest A/c (Being purchase of 1000 debentures at Rs 96 ex interest)</td>
<td>1,20,000</td>
<td>1,20,000</td>
</tr>
<tr>
<td>July 1</td>
<td>Own Debentures A/c Debenture Interest A/c To Bank A/c (Being purchase of 1000 debentures at Rs 96 ex interest)</td>
<td>96,000</td>
<td>3,000</td>
</tr>
<tr>
<td>September 30</td>
<td>Debenture interest A/c To Bank A/c To Interest on Own Debentures A/c (Being interest on 9000 debentures for 6 months and own debentures for 3 months)</td>
<td>57,000</td>
<td>54,000 3,000</td>
</tr>
<tr>
<td>2018 January 1</td>
<td>Own Debentures A/c Debenture Interest A/c To Bank A/c (Being 2000 own debentures purchased at Rs 96 cum interest)</td>
<td>1,86,000</td>
<td>1,92,000</td>
</tr>
<tr>
<td>March 31</td>
<td>Debenture Interest A/c To Bank A/c To Interest on own debentures A/c (Being interest on 7000 debentures for 6 months and own debentures for 3 months)</td>
<td>54,000</td>
<td>42,000 12,000</td>
</tr>
</tbody>
</table>
### Lesson Round Up

- Debentures are Part of loan capital and the company is liable to pay interest thereon whether it earns profit or not.

- Debentures may be of different kinds depending upon the conditions of their issue—secured, unsecured, bearer, registered, convertible, non-convertible, redeemable, irredeemable, first mortgage, second mortgage.

- Debentures may be issued at par, or at a premium, or at a discount.

- Debentures can be issued for cash, consideration other than cash and as collateral security.

- The term ‘Collateral Security may be defined as additional security given for a loan. Where a company obtains a secured loan from a bank or insurance company, it may mortgage some of its assets as a security against the said loan.

- Wherever a company issues debentures it undertakes to pay interest thereon at a fixed percentage. As the debentures acknowledge a debt, the payment of interest on the debt is obligatory on the part of the company issuing them irrespective of the fact whether the company earns profit or not. Thus, interest payable on debentures is a charge against the profits of the company.

- The discount/loss on debentures is in the nature of capital loss and therefore the same must be written off over the life time of debentures.

- When debentures are redeemed out of capital, no debenture redemption reserve is created out of profit of the company.

- Section 71(4) of the companies Act, 2013 provides that the debentures shall be redeemed out of divisible profits of the company through the creation of Debenture Redemption Reserve.

- A company if authorized by its articles of association, can buy its own debentures in the open market. The debentures so purchased can be used either for immediate cancellation or redemption of debentures or for investment.

- If the purchase price for the debentures includes interest for the expired period, the quotation is said to be “Cum-interest”. If, on the other hand, the purchase price for the debentures excludes the interest for the expired period, the quotation is said to be “Ex-interest”.

### Accounting for Debentures

<table>
<thead>
<tr>
<th>Account</th>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>1,20,000</td>
<td>1,20,000</td>
</tr>
<tr>
<td>To Debenture Interest A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest on Own Debentures A/c</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>To Profit &amp; Loss A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Being transfer of interest on own debentures)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12% Debentures A/c</td>
<td>3,00,000</td>
<td>2,82,000</td>
</tr>
<tr>
<td>To Own Debentures A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Profit on Cancellation A/c</td>
<td>18,000</td>
<td></td>
</tr>
<tr>
<td>(Being cancellation of 3000 own debentures)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit on Cancellation A/c</td>
<td>18,000</td>
<td>18,000</td>
</tr>
<tr>
<td>To Capital Reserve A/c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Being profit on cancellation transferred)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Kakloo Ltd issues Rs 1000, 15%, 5,000 debentures on which amount payable is Rs 200 on application, Rs 300 on allotment and balance on first call. In addition the company offers 1,000 – 12% second mortgage debentures of Rs 1000 each. In case of 15% debentures, the company received applications for 6200 debentures and the directors made pro-rata allotment and excess money was refunded. Journalise.

2. Rajkumar Ltd, purchased a building from Alok Ltd. for Rs 65,00,000. The payment was made as to 25% by accepting a bill of exchange, and for the balance debentures are allotted at 25% premium. Journalise in the books of purchaser.

3. Babli Ltd has 10,00,000 12% Debentures on which the interest is payable on 30th September and 31st March. Show the entries related to debenture interest. Tax deducted at source is 10%.

4. A company issued 15,000 10% Debentures of Rs 100 each on 1 April, 2013 at a discount of 6% redeemable at par by drawings method as follows:

<table>
<thead>
<tr>
<th>Date of redemption</th>
<th>Amt of Redemption (FV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 March 2015</td>
<td>5,00,000</td>
</tr>
<tr>
<td>31 March 2016</td>
<td>5,00,000</td>
</tr>
<tr>
<td>31 March, 2017</td>
<td>5,00,000</td>
</tr>
</tbody>
</table>

5. On 30th June 2012 following balances stood in the books of a company:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>8% First Mortgage Debentures Stock</td>
<td>2,00,000</td>
</tr>
<tr>
<td>Debenture Redemption Fund</td>
<td>2,13,080</td>
</tr>
<tr>
<td>Debenture Redemption Fund Investments:</td>
<td></td>
</tr>
<tr>
<td>Rs 70,000 6% Punjab Electricity Board Bonds</td>
<td>71,260</td>
</tr>
<tr>
<td>Rs 80,000 5% UP Water Board Bonds</td>
<td>64,068</td>
</tr>
<tr>
<td>Rs 60,000 8% Government of India Loan</td>
<td>61,710</td>
</tr>
<tr>
<td>Rs 16,000 7% Cooperative Bank Loan</td>
<td>16,042</td>
</tr>
</tbody>
</table>

On the same day the investments were sold: Electricity bonds at par, 5% loan at Rs 91, 8% loan at Rs 109 and 7% loan at Rs 103. On 1st July the debentures were redeemed at a premium of 5%.

Write up the accounts concerned:

6. MM Ltd. had the following among their ledger opening balances on January 1, 2014:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>11% Debentures A/c (2000 issue)</td>
<td>50,00,000</td>
</tr>
<tr>
<td>Debenture Redemption Reserve A/c</td>
<td>45,00,000</td>
</tr>
<tr>
<td>13.5% Debentures in XX Ltd. A/c (Face Value Rs. 20,00,000)</td>
<td>19,50,000</td>
</tr>
<tr>
<td>Own Debentures A/c (Face value Rs. 20,00,000)</td>
<td>18,50,000</td>
</tr>
</tbody>
</table>

As 31st December 2014 was the date for redemption of the 2000 debentures, the company started buying Own Debentures and made the following purchases in the open market:
1-2-2014 2,000 debentures at Rs. 98 cum-interest.
1-6-2014 2,000 debentures at Rs. 99 ex-interest.

Half yearly interest is due on the debentures on the 30th June and 31st December in the case of both the companies.

On 31st December 2014 the debentures in XX Ltd. were sold for Rs. 95 each ex-interest. On that date, the outstanding debentures of MM Ltd. were redeemed by payment and by cancellation. Show the entries in the following ledger accounts of MM Ltd. during 2014:

(a) Debenture Redemption Reserve A/c
(b) Own Debentures A/c

The face value of a debenture was Rs. 100 (Round off calculations to the nearest rupee.).

7. On 1st April, 2013 A Ltd. made an issue of 10,00,000 14% debentures of Rs. 100 each at Rs. 98 per debenture. According to the terms of issue, the company should redeem 10000 debentures either by purchasing them from the open market or by drawing lots at par at the company’s option. Profit, if any, on redemption is to be transferred to capital reserve.

The company’s accounting year ends on 31st March. Interest is payable on 30th September and 31st March.

During 2013-14 the company wrote off 20% of Debenture Discount Account.

During 2016-17, the company purchased and cancelled the debentures as given below:

(i) Rs. 200,00,000 at Rs. 95 per debenture on 30th September, and
(ii) Rs. 300,00,000 at Rs. 97 per debenture on 31st March.

Give the journal entries in the books of A Ltd. for both the years

8. A company issued 100,000 debentures of Rs. 100 each redeemable at the end of 10th year, but reserves the right to redeem earlier from the end of the 5th year. The company decides at the end of the 5th year to redeem 20,000 debentures out of the profits it has made.

Pass necessary journal entries relating to redemption.
Lesson 5
Related Aspects of Company Accounts

LESSON OUTLINE

- Buy-Back of Shares
- Modes of Buy-Back.
- Debentures-Issue & Redemption
- Accounting for Debentures
- Accounting Aspects of Issue
- Redemption of Debentures
- Different Methods of Redemption of Debentures
- Issue of Employee Stock Options
- Explanatory Statement Annexed to Notice:
  - Disclosure in Board’s Reports:
  - General Rights available:
  - Entry in Register of Members:
  - Underwriting of Shares
  - Underwriting Agreement
  - Sub-Underwriters
  - Underwriting Commission
  - Full and Partial Underwriting
  - Accounting Entries
  - LESSON ROUND UP
  - SELF TEST QUESTIONS

LEARNING OBJECTIVES

The most striking feature of a company is its ownership structure. The capital in a company is divided into small shares of fixed value. The shares of a company may be equity shares or preference shares. Further, equity shares can also be issued with differential rights as to dividend, voting or otherwise. The issue of share capital as means of raising long-term funds for financing the business activities. Equity sources of financing are however not always sufficient to meet the ever growing needs of the corporate expansion and progress. Hence, corporates turn to debt financing through financial institutions, commercial banks or by issuing debt instruments either through the route of private placement or by offering the same for public subscription. Owing tax shield provided by debt instruments, the debt financing not only helps in reducing the cost of capital but also helps in designing appropriate capital structure of the company.

The objective of this lesson is to make students aware about accounting of different aspects of share capital and deals with the accounting treatment of different aspects of debenture and bond especially with issue, redemption including conversion of debenture. After studying this lesson one should be able to:

- understand the share capital structure in the balance sheet of a company.
- discuss the methods and accounting procedure of issue of shares.
- understand the accounting procedure of buy-back of shares.
- understand the accounting treatment for ESOPs and ESPS.
- understand the meaning of underwriting.
– familiarize with various types of underwriting.
– distinguish between marked application and unmarked applications.
– determine the liability of underwriters.
– state the meaning of debenture and bonds;
– describe the methods for the issue of debenture for cash and for consideration other than cash;
– explain the issue of debenture as a collateral security;
– explain the sources and record transaction relating to redemption of debenture;
– discuss the methods of redemption of debenture;
– record the Sinking Fund Investment transactions;
– deal with cum-interest and ex-interest, open market operations.
BUY-BACK OF SHARES

When a company has substantial cash resources, it may like to buy its own shares from the market particularly when the prevailing rate of its shares in the market is much lower than the book value; or what the company perceives to be its true value. Buy-back of shares enables the company to go back to its shareholders and offers to purchase from them the shares they hold. Buy-back of Securities is a very important tool for companies that wants to reduce their Share Capital.

Conditions for buy-back:

According to Section 68(2), following conditions must be satisfied in order to buy-back the shares:

(a) must be authorized by its articles;
(b) a special resolution has been passed at a general meeting of the company authorizing the buy-back, but the same is not required when:
   (i) the buy-back is 10% or less of the total paid up equity capital and free reserves of the company; and
   (ii) such buy-back has been authorized by the Board by means of a resolution passed at its meeting;
(c) the buy-back is twenty-five per cent or less of the aggregate of paid up capital and free reserves of the company. But in case of Equity Shares, the same shall be taken as 25% of paid up equity capital only.
(d) Debt Equity ratio should be 2:1, where: Debt is aggregate of secured and unsecured debts owed by the company after buy-back, and Equity: is the aggregate of the paid up capital and its free reserves;
(e) all the shares or other specified securities for buy-back are fully paid up;
(f) If shares or securities are listed, buy-back will be in accordance with the regulations made by the Securities and Exchange Board in this behalf; and
(g) the buy-back in respect of unlisted shares or other specified securities will be in accordance with Share Capital and Debentures Rules, 2014.
(h) no offer of buy-back shall be made within a period of one year from the date of the closure of the preceding offer of buy-back, if any.

Explanatory Statement – Section 68(3):

The notice of the meeting at which the special resolution is proposed to be passed shall be accompanied by an explanatory statement stating –

(a) a full and complete disclosure of all material facts;
(b) the necessity for the buy-back;
(c) the class of shares or securities intended to be purchased under the buy-back;
(d) the amount to be invested under the buy-back; and
(e) the time-limit for the completion of buy-back.

As per the rules, following more details is to be included in the Explanatory Statement:

(f) the date of the board meeting at which the proposal for buy-back was approved by the Board of Directors of the company;
(g) the number of securities that the company proposes to buy-back;
(h) the method to be adopted for the buy-back;
(i) the price at which the buy-back of shares or other securities shall be made;

(j) the basis of arriving at the buy-back price;

(k) the maximum amount to be paid for the buy-back and the sources of funds from which the buy-back would be financed;

(l) Shareholding:
   (a) it is the aggregate shareholding of the promoters and of the directors of the promoter, where the promoter is a company, of the directors and key managerial personnel, as on the date of the notice convening the general meeting;
   (b) the aggregate number of equity shares purchased or sold by persons mentioned in sub-clause (a) during a period of twelve months preceding the date of the board meeting at which the buy-back was approved and from that date till the date of notice convening the general meeting;
   (c) the maximum and minimum price at which purchases and sales referred to in sub-clause (b) were made along with the relevant date;

(m) if the persons mentioned in l (a) intend to tender their shares for buy-back –
   (a) the quantum of shares proposed to be tendered;
   (b) the details of their transactions and their holdings in the last twelve months, prior to the date of the board meeting at which the buy-back was approved including information of number of shares acquired, the price and the date of acquisition;

(n) a confirmation that there are no defaults subsisting in repayment of deposits, interest payment thereon, redemption of debentures or payment of interest thereon, or redemption of preference shares, or payment of dividend due to any shareholder, or repayment of any term loans, or interest payable thereon to any financial institution or banking company;

(o) a confirmation:
   (a) that the Board of directors have made a full enquiry into the affairs and prospects of the company and that they have formed the opinion- general meeting is convened there shall be no grounds on which the company could be found unable to pay its debts;
   (b) about the company’s prospect for the year immediately following that date, its management character and initiations, its financial resources that will be available during that year so that the company shall he able to meet its liabilities as and when they fall due and shall not be rendered insolvent within a period of 1 year from that date; and
   (c) the directors have taken into account the liabilities(including prospective and contingent liabilities), as if the company were being wound up under the provisions of the Companies Act, 2013.

(p) a report addressed to the Board of Directors by the company’s auditors stating that-
   (i) they have inquired into the company’s state of affairs;
   (ii) the amount of the permissible capital payment for the securities in question is in their view properly determined;
   (iii) that the audited accounts on the basis of which calculation with reference to buy-back is done is not more than six months old from the date of offer document; and
   (iv) the Board of Directors have formed the opinion as specified in point 'o' on reasonable grounds
Other Conditions for Buy back

- Every buy-back shall be completed within a period of one year from the date of the resolution or special resolution, as the case may be, passed by the Board. [Section 68(4)]

- The buy-back can be:
  
  (a) from the existing shareholders or securityholders on a proportionate basis;
  
  (b) from the open market;
  
  (c) by purchasing the securities issued to employees of the company pursuant to a scheme of stock option or sweat equity. [Section 68(5)]

- Before making such buy-back, file with the Registrar, a declaration of solvency signed by at least two directors of the company, one of whom shall be the managing director, if any, Form No. SH.9 may be prescribed and verified by an affidavit to the effect that the Board of Directors has made a full inquiry into the affairs of the company as a result of which they have formed an opinion that it is capable of meeting its liabilities and will not be rendered insolvent within a period of one year from the date of declaration adopted by the Board. [Section 68(6)]

- Company shall extinguish and physically destroy the shares or securities so bought back within seven days of the last date of completion of buy-back. [Section 68(7)]

- Where a company completes a buy-back of its shares or other specified securities, it shall not make a further issue of the same kind of shares or other securities including allotment of new shares or other specified securities within a period of six months except by way of:
  
  (a) bonus issue, or
  
  (b) in the discharge of subsisting obligations such as conversion of warrants, stock option schemes, sweat equity or conversion of preference shares or debentures into equity shares.

- Company shall maintain a register in Form No. SH.10 of the shares or securities so bought, the consideration paid for the shares or securities bought back, the date of cancellation of shares or securities, the date of extinguishing and physically destroying the shares or securities. The register of shares or securities bought back shall be maintained at the registered office of the company and shall be kept in the custody of the secretary of the company or any other person authorized by the board in this behalf. The entries in the register shall be authenticated by the secretary of the company or by any other person authorized by the Board for the purpose.

- A company shall, after the completion of the buy-back under this section, shall file with the Registrar a return in Form No. SH.11 containing such particulars relating to the buy-back within thirty days of such completion. There shall be annexed to the return, a certificate in Form No. SH.15 signed by two directors of the company including the managing director, if any, certifying that the buy-back of securities has been made in compliance with the provisions of the Act and the rules made thereunder.

- If a company makes any default in complying with the provisions of this section, it shall be punishable with a fine which shall not be less than one lakh rupees and which may extend to three lakh rupees, and every officer of the company who is in default shall be punishable with imprisonment for a term which may extend to three years, or with a fine which shall not be less than one lakh rupees and which may extend to three lakh rupees, or with both.
Transfer of certain sums to capital redemption reserves account (Section 69)

Where a company purchases its own shares out of free reserves or securities premium account, a sum equal to the nominal value of the shares so purchased shall be transferred to the Capital Redemption Reserve Account and details of such transfer shall be disclosed in the balance sheet. The Capital Redemption Reserve Account may be applied by the company, in paying up unissued shares of the company to be issued to members of the company as fully paid bonus shares.

Prohibition on buy-back in following circumstances (Section 70)

No company shall directly or indirectly purchase its own shares or other specified securities –

(a) through any subsidiary company including its own subsidiary companies;

(b) through any investment company or group of investment companies; or

(c) if a default, is made by the company, in the repayment of deposits accepted either before or after the commencement of this Act, interest payment thereon, redemption of debentures or preference shares or payment of dividend to any shareholder, or repayment of any term loan or interest payable thereon to any financial institution or banking company. Provided that the buy-back is not prohibited, if the default is remedied and a period of three years has lapsed after such default ceased to subsist.

No company shall, directly or indirectly, purchase its own shares or other specified securities in case such company has not complied with the provisions of:

(a) Sections 92: Annual Return

(b) Section 123: Declaration and Payment of Dividend

(c) Section 127: Failure to pay Dividend

(d) Section 129: Failure to give True and Fair Statement

SEBI Guidelines

The Securities and Exchange Board of India, has issued the following guidelines with regard to buy-back of shares or other specified securities by companies, having been empowered to do so by the Companies (Amendment) Act, 1999. These guidelines came into effect from 14-11-1998.

MODES OF BUY-BACK

Buy-back is permissible:

(a) from the existing security holders on a proportionate basis through the tender offer; or

(b) from the open market through

1. Book-building process,

2. stock exchange;

(c) from odd lots, that is to say, where the lot of securities of a public company whose shares are listed on a recognized stock exchange is smaller than such marketable lot as may be specified by the stock exchange: or

(d) by purchasing the securities issued to employees of the company pursuant to a scheme of stock option or sweat equity.

When a company proposes to buy-back its own shares; it shall after passing the special resolution or resolution of its Board of Directors make a public announcement in at least one English National Daily, one Hindi National
Daily, and a Regional Language Daily with wide circulation at the place where the registered office of the company is located.

The public announcement shall specify a date which shall be the ‘specified date’ for the purposes of determining the names of the shareholders to whom the letter of offer shall be sent. The specified date cannot be earlier than 30 days and not later than 42 days from the date of such public announcement. The letter of offer shall be dispatched not earlier than 21 days from the submission of its draft with SEBI through the merchant banker. The date of opening of the offer shall not be earlier than 7 days or later than 30 days after the specified date. Companies buying-back through the tender offer have to open an escrow account.

A company cannot buy-back its shares from any person as per SEBI guidelines:

- through negotiated deals whether on or off the stock exchange; or
- through spot transactions; or
- through any private arrangements.

Price at which shares shall be bought back has to be determined by shareholders through a special resolution. A copy of their resolution has to be filed with the SEBI as well as the stock exchanges where the shares of the company are listed, within 7 days from the date of passing the resolution. Companies buying-back through stock exchanges should disclose purchases daily. Buy-back offer shall remain open for not less than 15 days and not more than 30 days. The verification of shares bought back has to be completed within 15 days of the closure of the offer and payments made within 7 days. The onus of complying with the SEBI guidelines is on the merchant banker who has to file a ‘due diligence certificate’ with the SEBI.

### Escrow Account

Regulation 10(1) of the Securities and Exchange Board of India provides that a company shall, as and by way of security for performance of its obligations on or before the opening of the offer of repurchase, deposit in an escrow account such a sum as is specified in 10(2), that is:

- If the consideration payable does not exceed Rs. 100 crores, 25% of the consideration;
- If the consideration payable exceeds Rs.100 crores, 25% up to Rs. 100 crores, and 10% thereafter.

Escrow account means an account in which money is held until a specified duty is performed, i.e., till the consideration for buy-back of shares is paid to the shareholders. This account consists of the cash deposited with a scheduled commercial bank, or bank guarantee in favour of the merchant banker, or a deposit of acceptable securities with appropriate margin, with the merchant banker, or a combination of these.

### Advantages of Buy-Back

Buy-back have the following advantages:

- A company with capital, which cannot be profitably employed, may get rid of it by resorting to buy-back, and restructuring its capital.
- Free reserves which are utilized for buy-back instead of paying dividend enhance the value of the company’s shares and improve its earnings per share.
- Surplus cash may be utilized by the company for buy-back and avoid the payment of dividend tax.
- Buy-back may be used as a weapon to frustrate any hostile takeover of the company by undesirable persons.

### Accounting for Buy-Back

Buy-back of shares is just the opposite of issue of shares. Just as shares may be issued at par, at a premium, even buy-back may be at par, at a premium or at a discount. The basis of accounting for buy-back is Section
68 of the Amended Companies Act. This Section not only permits a company to buy-back or redeem its equity shares, but also specifies the sources from out of which repurchase is to be effected.

According to this Section, a company may buy-back its shares or other specified securities from out of

1. its free reserves, or
2. the securities premium account, or
3. the proceeds of any shares or other specified securities like employees’ stock option.

However, no buy-back of shares shall be made out of the proceeds of an earlier issue of the same kind of shares. This Section also lays down that all the shares or other specified securities for buy-back are fully paid up.

As per Section 69, when a company purchases its own shares out of free reserves. Then a sum equal to the nominal value of the shares so purchased shall be transferred to the Capital Redemption Reserve Account and details of such transfer should be disclosed in the balance sheet.

### DEBENTURES-ISSUE AND REDEMPTION

#### Introduction

“Debenture” includes debenture stock, bonds or any other instrument of a company evidencing a debt, whether constituting a charge on the assets of the company or not.

A commercial definition of the debenture is an acknowledgement of a debt in writing, given under the seal of the company, containing a contract for the repayment of the principal sum at a specified date, and for the payment of interest (usually half yearly) at a fixed rate until the principal sum is repaid. It may or may not give a charge on the assets of the company as a security for the loan.

A debenture like a share is also a movable property transferable in the manner provided in the Articles of the company.

#### Requirement

The long-term requirements of capital are raised by any company primarily through issue of shares and debentures. The shareholders are essentially the owners of the enterprise, those who buy debentures are creditors for long-term funds and do not enjoy voting rights. In brief all securities other than shares issued by a company come under the term debentures.

According to the guidelines issued by the Controller of Capital Issues, the objects of the issue can be among other things:

1. Setting up of new projects;
2. Expansion or diversification of existing projects;
3. Normal capital expenditure for modernization;
4. To augment long-term resources of the company for working capital requirements;
5. Merger /Amalgamation of companies in pursuance of schemes approved by banks, financial institutions and/or any legal authority;
### Differences between Shares and Debentures

<table>
<thead>
<tr>
<th></th>
<th>Shares</th>
<th>Debentures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>An instrument to acknowledge the ownership of the company</td>
<td>An instrument to acknowledge the creditors of the company.</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>A shareholder is the owner and a member of the company.</td>
<td>A debentureholder is not a member but a creditor.</td>
</tr>
<tr>
<td><strong>Return</strong></td>
<td>A shareholder may receive dividend only when a company makes a profit.</td>
<td>A debentureholder has a right to interest even if the company does not make profit.</td>
</tr>
<tr>
<td><strong>Rate of return</strong></td>
<td>Dividend rate can vary depending on the profit position.</td>
<td>Debenture carries a fixed rate of interest.</td>
</tr>
<tr>
<td><strong>Accounting treatment</strong></td>
<td>Dividend is given out of appropriable profit and not chargeable to Profit and Loss account.</td>
<td>Debenture interest is chargeable to Profit and Loss account.</td>
</tr>
<tr>
<td><strong>Redemption</strong></td>
<td>In the case of shares, the concept of redemption does not apply. However, as per the recent change in the companies Act, a company can buy-back shares in accordance with the provisions in the Act.</td>
<td>Debentures are normally redeemable although a company can issue perpetual debentures.</td>
</tr>
<tr>
<td><strong>Voting rights</strong></td>
<td>A shareholder has voting rights.</td>
<td>A debentureholder cannot have voting rights.</td>
</tr>
<tr>
<td><strong>Status at the time of winding up</strong></td>
<td>At the time of winding up shareholders have the least priority regarding the return of amount due to them.</td>
<td>At the time of winding up debenture holders have a priority over the share holders regarding the return of amount due to them.</td>
</tr>
</tbody>
</table>

### Types of Debentures

Debentures can be classified according to permanence, security, priority, convertibility and records point of view.

**1) Permanence point of view.**

(a) **Redeemable debentures:**

Debentures, which can be redeemed or for which payment is made after a specified time are called Redeemable Debentures.

These are redeemable-

(i) At the expiry of a specified period either at par or at a premium;

(ii) By purchasing in the open market at any time at the price prevailing in the market; and

(iii) By annual drawings.

(b) **Irredeemable debentures:**

When the issuing company does not fix any date by which debentures can be redeemed, and the holders of such debentures cannot demand payment from the company so long as it is a going concern. Usually such debentures are repayable after a long period of time or when the company decides to wind up.
(2) Priority point of view.

(a) First debentures:

Those debentures, which are repaid before other debentures are paid out, are called First Debentures.

(b) Second debentures:

Those debentures, which are paid after the payment towards the First Debenture, are called Second Debentures.

(c) Convertible debentures:

Those debentures, which are given the option to convert the debentures fully or partly into equity shares after a specified time, are called Convertible Debentures. If the debentures are fully converted, then it is called as ‘Fully Convertible Debentures’. Those which are partly convertible are called ‘Partly Convertible Debentures’. The non-convertible portion of the debenture is also called ‘Khoka’ in market circles.

Conversion may be at par or premium.

(d) Non-convertible Debentures:

The Debentures that can not be converted into equity shares such are non-convertible Debentures.

(3) Security point of view.

(a) Naked Debentures:

Those debentures which are not secured, are called naked debentures. Companies with very good standing are able to issue such debentures. They are not very common.

(b) Mortgage Debentures:

Debentures, which are secured either on a particular asset [called fixed charge], or on the general assets of the company [called floating charge], are called Mortgage debentures.

ACCOUNTING FOR DEBENTURES

There are three stages of accounting for debentures:

(i) When debentures are issued;

(ii) When provision for their redemption is made; and

(iii) When ultimately debentures are redeemed. A detailed study of each stage is made in the following pages.

1. ISSUE OF DEBENTURES

Debenture [Section 71]

(1) A company may issue debentures with an option to convert such debentures into shares, either wholly or partly at the time of redemption. Provided that the issue of such debentures, shall be approved by a special resolution passed at a general meeting.

(2) No company shall issue any debentures carrying any voting rights.

(3) Secured Debentures may be issued by a company subject to such terms and conditions as may be prescribed.

(4) Where debentures are issued by a company under this section, the company shall create a Debenture Redemption Reserve Account out of the profits of the company available for payment of dividend and
the amount credited to such account shall not be utilized by the company except for the redemption of debentures.

(5) No company shall issue a prospectus, or make an offer, or give an invitation to the public or to its members exceeding five hundred for the subscription of its debentures, unless the company has, before such issue or offer, appointed one or more debenture trustees, and the conditions governing the appointment of such trustees shall be such as may be prescribed.

(6) A debenture trustee shall take steps to protect the interests of the debentureholders and redress their grievances in accordance with such rules as may be prescribed.

(7) Any provision contained in a trust deed for securing the issue of debentures, or in any contract with the debentureholders secured by a trust deed, shall be void in so far as it would have the effect of exempting a trustee thereof from, or indemnifying him against, any liability for breach of trust, where he fails to show the degree of care and due diligence required of him as a trustee, with regard to the provisions of the trust deed conferring on him any power, authority or discretion; provided that the liability of the debenture trustee shall be subject to such exemptions as may be agreed upon by a majority of debentureholders holding not less than three-fourths in value of the total debentures at a meeting held for the purpose.

(8) A company shall pay interest and redeem the debentures in accordance with the terms and conditions of their issue.

(9) When at any time the debenture trustee comes to a conclusion that the assets of the company are insufficient or are likely to become insufficient to discharge the principal amount as and when it becomes due, the debenture trustee may file a petition before the Tribunal and the Tribunal may, after hearing the company and any other person interested in the matter, by order, impose such restrictions on the incurring of any further liabilities by the company as the Tribunal may consider necessary in the interests of the debentureholders.

(10) When a company fails to redeem the debentures on the date of their maturity or fails to pay interest on the debentures when it is due, the Tribunal may, on the application of any or all of the debentureholders, or debenture trustee and, after hearing the parties concerned, direct, by order, the company to redeem the debentures forthwith on payment of principal and interest due thereon.

(11) If any default is made in complying with the order of the Tribunal under this section, every officer of the company who is in default shall be punishable with imprisonment for a term which may extend to three years, or with a fine which shall not be less than two lakh rupees and which may he extended to five lakh rupees, or with both.

(12) A contract with the company to take up and pay for any debentures of the company may be enforced by a decree for specific performance.

(13) The Central Government may prescribe the procedure, for securing the issue of debentures, the form of debenture trust deed, the procedure for the debentureholders to inspect the trust deed and to obtain copies thereof, quantum of debenture redemption reserve required to be created and such other matters.

### Issue of Secured Debenture

The company shall not issue Secured Debentures, unless it complies with the following conditions, namely:-

(a) an issue of Secured Debentures may be made provided the date of its redemption shall not exceed ten years from the date of issue.
Provided that the following classes of companies may issue secured debentures for a period exceeding ten years but not exceeding thirty years,

(i) Companies engaged in setting up of infrastructure projects;

(ii) ‘Infrastructure Finance Companies’ as defined in clause (vii-a) of subdirection (1) of direction 2 of Non-Banking Financial (Non-deposit accepting or holding) Companies Prudential Norms (Reserve Bank) Directions, 2007;

(iii) ‘Infrastructure Debt Fund Non-Banking Financial companies’ as defined in clause (b) of direction 3 of Infrastructure Debt Fund Non-Banking Financial Companies (Reserve Bank) Directions, 2011.

(b) such an issue of debentures shall be secured by the creation of a charge, on the properties or assets of the company, having a value which is sufficient for the due repayment of the amount of debentures and interest thereon;

(c) the company shall appoint a debenture trustee before the issue of prospectus or letter of offer for subscription of its debentures and not later than sixty days after the allotment of the debentures, execute a debenture trust deed to protect the interest of the debentureholders ; and

(d) the security for the debentures by way of a charge or mortgage shall be created in favour of the debenture trustee on-

(i) any specific movable property of the company (not being in the nature of pledge); or

(ii) any specific immovable property wherever situate, or any interest therein.

SEBI REGULATIONS ON ISSUE OF DEBENTURES

1. Credit rating. It is compulsory in the case of all issues of debenture. If a company has obtained more than one rating, all such ratings must be disclosed. If the issue exceeds Rs. 200 crores, rating must be obtained from two agencies.

2. Put and call options. If FCDs are to be converted before 18 months, they are considered as quasi-equity. If conversion is after 18 months but before 36 months, it is treated as deferred equity. In the case of deferred equity, the conversion will be optional in the hands of debentureholder. In the case of conversion beyond 36 months, it must be made optional with both put and call options.

3. Security for debentures. If secure debentures are issued, a company must obtain certificate from the bankers that the assets are free from encumbrances or no objection certificate from the bank/financial institution for creating a second charge or pari passu charge as per terms of offer of debentures. Normally security must be created within 6 months. If security is not created within 12 months, a penal interest at 2% is payable to debentureholders. If the security is not created, within 18 months, a meeting of the debentureholders must be called with 21 days notice to explain the reasons for the delay in creating the security and the expected date by which security will be created.

Trustees to debentures will supervise the creation of security. If security is not created, the debentures will be unsecured. As stated earlier in such a situation, the debentures will be treated as fixed deposits which makes it incumbent to satisfy the requirements of Sec. 73 & 74.

4. Debenture trustees. If the maturity of debentures is more than 18 months, the company has to appoint debenture trustees to safeguard the interests of the debentureholders. The trustees should have requisite powers for protecting the interests of the debentureholders including their rights to nominate a director on the board in consultation with institutional debentureholders.

The debenture trustees must also ensure the compliance of the following:

(a) Lead financial institutions / investment institutions should monitor the progress in respect of debentures raised for project finance/modernization/ expansion/ diversification/ normal capital expenditure.
(b) The lead bank must monitor debentures raised for working capital funds.
(c) Obtain a certificate from the company’s auditors during the implementation period of the projects and in the case of debentures for working capital at the end of each accounting year.
(d) Debenture issues by companies belonging to the groups for financing replenishing of funds or acquiring shares in other companies should not be permitted.
(e) The trustees must supervise the implementation of the conditions regarding creation of security for the debentures and debenture redemption reserve.

**ACCOUNTING ASPECTS OF ISSUE**

Accounting aspects of issue of debenture may be studied from three different sides.

(1) What would be the consideration?
(a) Issued for cash
(b) Issued for consideration other than cash
(c) Issued as collateral security

(2) What would be the issue price?
(a) Issued at par
(b) Issued at a premium
(c) Issued at a discount

(3) How the redemption be made.
(a) Redeemed at par
(b) Redeemed at a premium
(c) Redeemed at a discount

Combining (2) and (3), the following are the options of issue.
(a) Issued at par and redeemable at par
(b) Issued at a discount and redeemable at par
(c) Issued at a premium and redeemable at par
(d) Issued at a premium and redeemable at a premium
(e) Issued at par and redeemable at a premium
(f) Issued at a discount and redeemable at a premium

The accounting entries for the above six combinations are given in the table below.

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Issued at par and redeemable at par</td>
<td>Debited Bank</td>
</tr>
<tr>
<td>B. Issued at a discount and redeemable at par</td>
<td>Debited Bank</td>
</tr>
</tbody>
</table>
**Loss on the issue of debentures includes discount on issue and a premium on redemption.**

### Issue for Consideration other than Cash

In this case debentures are issued for consideration other than cash. Examples are allotment of debentures for assets purchased or technical services received. There is no receipt of cash in these transactions for the allotment of debentures.

### Debentures issued as Collateral Security

(a) This is the third type of consideration for which company issues debentures. The issue of debentures as a collateral security means issue of debentures as a subsidiary or secondary security, that is, a security in addition to the prime security. Secondary security is to be realized only when the prime security fails to pay the amount of loan. Debentures issued as a collateral security can be dealt within two ways in the books:

#### a. First Method

No entry is made in the books. On the liability side of the balance sheet below the item of loan a note that it has been secured by the issue of debentures is to be given. This is shown in the balance sheet as follows:

#### b. Second method

Sometimes the issue of debentures as collateral security is recorded by making a journal entry as follows:

- **Debenture suspense account**  
  Dr. (This appears on the assets side)

- **To Debenture account**  
  (This appears on the liabilities side)

When the loan is paid the above entry is cancelled by means of a reverse entry.

### Discount on the issue of Debenture

When debentures are issued at a discount, it is prudent to write off the loss during the life of debentures.

### REDEMPTION OF DEBENTURES

Redemption of debentures is the process of discharging the liability on account of debentures in accordance with the terms of redemption stated in the debenture trust deed. Discharge of debenture liability is usually by paying cash to the debentureholders. But this can take other forms, such as conversion or rollover. In the case

<table>
<thead>
<tr>
<th></th>
<th>Issued at a premium and redeemable at par</th>
<th>Bank</th>
<th>Debentures Security Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.</td>
<td>Bank</td>
<td>Debentures A/c Security Premium</td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>Bank</td>
<td>Debentures Prem. on redemption of debentures.</td>
<td></td>
</tr>
<tr>
<td>E.</td>
<td>Bank</td>
<td>Debentures Prem. on redemption of debentures.</td>
<td></td>
</tr>
<tr>
<td>F.</td>
<td>Bank</td>
<td>Debentures Prem. on redemption of debentures.</td>
<td></td>
</tr>
</tbody>
</table>
of conversion debentures are converted into preference shares or equity shares. Rollover refers to the issue of new debentures, in exchange for the old ones. Both conversion and rollover are subject to detailed SEBI guidelines.

When a company issues debentures it must also plan the resources required for such redemption. This can be done by setting aside profits every year and investing them wisely in investments outside, so that there will be no liquidity problem at the time of redemption. Alternatively, the company can take an insurance policy by paying regular premium, so that the policy matures coinciding with the time of redemption. With the amount received on the maturity of policy the company faces no problem in carrying out the redemption. These are the two ways in which a company can make provisioning for redemption of debentures. The question of provisioning was earlier left to the discretion of company and many companies did provisioning routinely, as a matter of financial prudence. Now under the SEBI guidelines, the matter is no more a matter of discretion or financial prudence. SEBI guidelines provide for compulsory provisioning and also restrictions on the payment of dividends till debentures are redeemed. We will first deal with SEBI guidelines before proceeding with the accounting aspects of creating Sinking Fund for Redemption of Debentures.

**SEBI on Creation of Debenture Redemption Reserve (DRR)**

1. A company has to create DRR in case of the issue of debentures with maturity of more than 18 months.
2. The issuer must create DRR in accordance with the provisions given below.
   
   (a) If debentures are issued for project finance DRR can be created up to the date of commercial production.
   
   (b) The DRR in respect of debentures issued for project finance may be created either in equal installments or higher amounts if profits so permit.
   
   (c) In the case of PCDs, DRR must be created for the non-convertible portion of debenture issues on the same lines as applicable for fully non-convertible debenture issues.
   
   (d) In respect of convertible issues by new companies, the creation of DRR must commence from the year the company earns profits for the remaining life of debentures.
   
   (e) DRR shall be treated as part of general reserve for consideration of bonus issues proposals and for price fixation related to post-tax return.
   
   (f) Company must create DRR equivalent to 50% of the amount of debenture issue before debenture redemption commences. Only after the company has actually redeemed 10% of the debenture liability, drawing from DRR is permissible only after the company has actually redeemed 10% of the debenture liability. The requirement of creation of DRR is not applicable to the issue of debt instruments by infrastructure companies.

**Restrictions on Dividends**

(a) In the case of new company, distribution of dividends shall require the approval of trustees to the issue of debentures and lead institution, if any.

(b) In the case of existing companies prior permission of the lead institution for declaring dividend exceeding 20% or as per the loan covenants is necessary, if the company does not comply with institutional condition regarding interest and debt coverage ratio.

(c) Dividends may be distributed out of profits of particular year only after transfer of requisite amount in DRR. If residual profits are inadequate to distribute reasonable dividends, company may distribute dividend out of general reserve.
As mentioned already the two modes of provisioning are (1) the sinking fund method, and (2) the insurance policy method.

It is always prudent for a company to save money to be able to redeeming debentures on the due date. In the absence of such a provision it becomes difficult for the company to find lumpsum amount to repay the debt. This can be done by adopting any of the two methods explained below:

**Sinking fund method**

Under this method the amount is invested in first class securities with secured and fixed returns. Accumulation of interest becomes compounded resulting to produce the amount required to redeem the debentures on the due date. This method of providing for funds is also called debenture redemption fund method. The sinking fund method for redeeming a loan is different from sinking fund method for replacing an asset in the following ways:

1. Sinking fund created for replacing an asset is in the nature of accumulated depreciation, while sinking fund created for repaying loan is in the nature of accumulated profits. It is for this reason that sinking fund’s balance (after the redemption of loan) is transferred to general reserve, while that for an asset it is transferred to asset account.

2. Annual installment set aside for the replacement of an asset is a charge and is debited to profit and loss account, while that for the redemption of a loan is an appropriation and is debited to profit and loss appropriation account.

It may be noted that in the final year the amount appropriated from the profits of the company and the amount received as interest on sinking fund investment are not invested, as the amount would be needed on the following day for the redemption of debentures.

**Non-Cumulative Sinking Fund**

A non-cumulative sinking fund differs from the cumulative type of sinking fund only in one respect: in non-cumulative sinking fund, interest received on sinking fund investment is not reinvested, nor is it transferred to sinking fund. Interest on sinking fund investment is treated as a simple profit and is kept in the business without earmarking its use and the amount is transferred to profit and loss account.

Nevertheless, a careful study of the two types of funds will reveal that there is no difference between the two methods. In a non-cumulative type of fund, the appropriation from the profits is more, but the excess burden on the profits is corrected by the transfer of interest on the investment to profit and loss account. While in the case of a cumulative kind of sinking fund method, the appropriation from the profit is less, but that amount is made up by crediting to sinking fund the amount of interest earned on the investment.

**Insurance Policy Method**

Under this method, an insurance policy for the required amount is taken for the redemption of debentures at the end of a fixed period. Under this system, the premium is paid regularly in installments and the insurance company, in its turn, returns the total accumulated money at the expiry of the period. Money so received is used for redeeming debentures. This method differs from the sinking fund method only in respect of interest on investment. Unlike sinking fund method, the insurance company does not give any interest on the installments received.

**DIFFERENT METHODS OF REDEMPTION OF DEBENTURES**

Though discharge of debenture liability is usually done by paying cash to the debentureholders for which either of the two methods mentioned above are followed to meet the cash requirement at the time of redemption.
However, following are the other methods by which the liability on debentures may be extinguished.

### Conversion

The conversion of debentures means that the debentures are converted into preference shares or equity shares.

For the purpose of conversion debentures are to be classified as fully convertible debentures (FCDs), partly convertible debentures (PCDs), and non-convertible debentures (NCDs). A company cannot issue FCDs having a conversion period of more than 36 months, unless the conversion is made optional with a put and call option. If conversion takes place 18 months after the date of allotment but before the 36th month, it is optional for debentureholder to convert them in part or whole. If he does not exercise the option it will effectively become an NCD. FCDs with conversion period less than 12 months are treated as quasi-equity and at par with the equity.

FCDs are fully convertible into equity shares either at par or a premium. The premium to be charged at conversion must be predetermined and announced in the prospectus. PCDs the comprises two parts, namely the convertible portion and the non-convertible portion. It is only the convertible portion that can be converted into shares.

In the case of NCDs the liability will be discharged by making payment in cash or rollover. A company can also convert NCDs at a later date into equity shares, but it depend on the debentureholder to exercise the option or not that the debentureholder will be issued.

### Rollover

Rollover means the new debentures in the place of the old ones. Rollover must be with the written consent of the debentureholder. If he does not given written consent, his claim is settled in cash. Also whenever the debenture liability is rolled over the company must obtain fresh credit rating. Fresh trust must be executed at the time of rollover. Also fresh security must be created in respect of rolled over debentures. Subject to the conditions listed rollover can only be done without change in the interest rate if the non-convertible portion of PCDs/ NCDs of a listed company exceeds Rs. 50 lakhs.

### Sources of redemption

From the point of view of sources redemption may be carried out with the help of any of the following sources:

1. Out of capital,
2. Out of profits,
3. Conversion or rollover (already discussed), and
4. Out of provision in the nature of sinking fund.

We shall now consider each case.

### Redemption from out of Capital

SEBI guidelines require the setting up of a ‘Debenture Redemption Reserve when profits are available and the debentures are issued for a period beyond 18 months. If the debentures are for a period less than 18 months or profits are not available for the capital redemption, debentures may be redeemed out of capital. When redemption is carried out of capital only entries are made for redemption and no entry made to transfer profits to ‘Debenture Redemption Reserve.

### Redemption out of Profits

Nowadays it is mandatory to set up a ‘Debenture Redemption Reserve’. Earlier companies could redeem
debentures out of profits without a formal setting up of ‘Debenture Redemption Reserve’. It were the directors who used to decide as to whether the redemption is from capital or profits.

After carrying out the entire redemption the amount to the credit of debenture redemption reserve will be transferred to general reserve account.

### Conversion or Rollover

In the case of conversion debentures are converted into equity or preference shares. In the case of rollover old debentures or replaced by the issue of new debentures. The new shares may be issued at par or premium.

Additional accounting entries for conversion or rollover are as below:

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Debited</th>
<th>Credited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversion into shares at par</td>
<td>Deb. Redemption/ Deb. Holders A/c</td>
<td>Equity/ Preference share capital</td>
</tr>
<tr>
<td>Conversion into shares at premium</td>
<td>do</td>
<td>Share capital Security prem.</td>
</tr>
<tr>
<td>Rollover at par</td>
<td>do</td>
<td>New debentures</td>
</tr>
<tr>
<td>Rollover at a premium</td>
<td>do</td>
<td>New debentures Security prem.</td>
</tr>
</tbody>
</table>

### When to be redeemed?

Time of redemption can be classified in the following three ways:

1. Redemption by annual drawings even before the maturity of debentures.
2. Purchases of debentures from the open market and canceling them immediately or later.
3. Redemption is done only on maturity.

### Redemption by Annual Drawings

SEBI guidelines state that the issuing company shall redeem the debentures as per the offer document. A company at the time of issue may provide for staggered redemption. This can be done in two ways. The redemption may be according to a certain amount for each debenture with a schedule so that redemption may be completed over a time frame. The other way is to select certain number of debentures every year and redeem them fully. The debentures to be redeemed are selected by drawing a lot annually. This method is known as ‘Redemption by Annual Drawings’. Again whether the redemption is at par, at a premium or discount, depends on the terms of offer.

Nowadays it is also common for companies to have a call option which gives them the right to redeem the debentures at a predetermined price. This gives them the right to cancel but not the obligation to cancel.

### Purchase and Cancellation of Own Debentures

Debentures may also be cancelled before the expiry of the period by purchasing them from the open market at the market price, which may be at a premium or discount from the book value. It is certainly advantageous to buy when they are selling in the market at a discount. Cancellation of debentures may be done immediately or later. In some cases such debentures may also be reissued. This method of redemption is known as ‘purchase and cancellation of own debentures’.

For purchase and cancellation of own debentures, the company has to consider the following parameters.

1. The company may cancel such debentures immediately or carry them as an investment and cancel them at a later date.
(2) Where they are immediately cancelled, a debenture liability is extinguished to the extent of par value of the debentures cancelled. From the date of cancellation, interest is not payable on cancelled debentures.

Since the debenture liability cancelled is more than the amount paid for such debentures, profit on cancellation of debentures should be recorded. If there is a Sinking Fund, such profit is transferred to it.

(3) When debentures are carried as an investment, debenture liability is shown as before and at the same time, ‘Investment in own Debentures’ or simply ‘Own Debentures’ appears on the assets side of the balance sheet, till they are cancelled.

(4) In the case of own debentures, interest on own debentures must be reckoned as income or set-off against the gross interest payable on the whole of debentures.

(5) If debentures are purchased between two interest dates, and not immediately after the payment of interest, the price paid for debentures would depend on the quotation.

### Accounting Entries

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Purchase of own Debenture</td>
<td>Own Debentures</td>
<td>Bank</td>
</tr>
<tr>
<td>(2) Cancellation of own debentures</td>
<td>Debentures</td>
<td>Own Debentures</td>
</tr>
<tr>
<td>(3) Profit on cancellation</td>
<td>Debentures</td>
<td>Profit on Cancellation of Debentures/Sinking Fund</td>
</tr>
<tr>
<td>(4) Loss on cancellation</td>
<td>Sinking Fund/Loss on Cancellation</td>
<td>Own Debentures</td>
</tr>
<tr>
<td>(5) Reissue (or sale) of own debentures</td>
<td>Bank</td>
<td>Own debentures</td>
</tr>
<tr>
<td>(6) Profit on reissue</td>
<td>Own Debentures</td>
<td>Profit and Loss A/c</td>
</tr>
<tr>
<td>(7) Loss on reissue</td>
<td>Profit and Loss A/c</td>
<td>Own Debentures</td>
</tr>
<tr>
<td>(8) Interest on own debentures</td>
<td>Profit and Loss A/c</td>
<td>Sinking Fund</td>
</tr>
</tbody>
</table>

### OPTION SCHEME

**EMPLOYEE STOCK OPTION PLAN (ESOP), EMPLOYEES STOCK OPTION SCHEME (ESOS)**

**Issue of Employee Stock Options**

A company, other than a listed company, which is not required to comply with Securities and Exchange Board of India Employee Stock Option Scheme Guidelines shall not offer shares to its employees under a scheme of employees’ stock option (hereinafter referred to as “Employees Stock Option Scheme”), unless it complies with the following requirements, namely:-

(1) the issue of Employees Stock Option Scheme has been approved by the shareholders of the company by passing a special resolution.

*Explanation:* For the purposes of clause (b) of Sub-section (1) of Section 62 and this rule “Employee” means-

(a) a permanent employee of the company who has been working in India or outside India; or
(b) a director of the company, whether a whole time director or not, but excluding an independent
director; or

c) an employee as defined in clauses (a) or (b) of a subsidiary, in India or outside India, or of a
holding company of the main company, or of an associate company.

Employees Stock Option Scheme does not include –

(i) an employee who is a promoter or a person belonging to the promoter group; or

(ii) a director who either himself or through his relative or through anybody in the corporate,
directly or indirectly, holds more than ten percent of the outstanding equity shares of the
company.

(2) The company shall make the following disclosures in the explanatory statement annexed to the notice
for passing of the resolution-

(a) the total number of stock options to be granted;

(b) identification of classes of employees entitled to participate in the Employees Stock Option
Scheme;

(c) the appraisal process for determining the eligibility of employees to the Employees Stock Option
Scheme;

(d) the requirements of vesting and period of vesting;

(e) the maximum period within which the options shall be vested;

(f) the exercise price or the formula for arriving at the same;

(g) the exercise period and process of exercise;

(h) the lock-in period, if any;

(i) the maximum number of options to be granted per employee and in aggregate;

(j) the method which the company shall use to value its options;

(k) the conditions under which option vested in employees may lapse, e.g., in case of termination of
employment for misconduct;

(l) the specified time period within which the employee shall exercise the vested options in the event
of a proposed termination of employment or resignation of employee; and

(m) a statement to the effect that the company shall comply with the applicable accounting standards.

(3) The companies granting option to their employees pursuant to Employees Stock Option Scheme will have
the freedom to determine the exercise price in conformity with the applicable accounting policies, if any.

(4) The approval of shareholders by way of separate resolution shall be obtained by the company in case of-

(a) grant of option to employees of subsidiary or holding company; or

(b) grant of option to identified employees, during any one year, equal to or exceeding one percent of
the issued capital (excluding outstanding warrants and conversions) of the company at the time
of grant of option.

(5) (a) The company may by special resolution vary the terms of Employees Stock Option Scheme not yet exercised by the employees, provided such variation is not prejudicial to the interests of the option holders.

(b) The notice for passing special resolution for variation of terms of Employees Stock Option Scheme
shall disclose complete variation, the rationale of it, and the details of the employees who are beneficiaries of such variation.

(6) (a) There shall be a minimum period of one year between the grant of options and vesting of option:

In a case where options are granted by a company under its Employees Stock Option Scheme, in lieu of options held by the same person under an Employees Stock Option Scheme in another company, which has merged or amalgamated with the first-mentioned company, the period during which the options granted by the merging or amalgamating company were held by him shall be adjusted against the minimum vesting period required under this clause;

(b) The company shall have the freedom to specify the lock-in period for the shares issued pursuant to exercise of option.

(c) The Employees shall not have right to receive any dividend, or to vote, or in any manner enjoy the benefits of a shareholder in respect of option granted to them, till shares are issued on exercise of option.

(7) The amount, if any, payable by the employees, at the time of grant of option-

(a) may be forfeited by the company if the option is not exercised by the employees within the exercise period; or

(b) the amount may be refunded to the employees if the options are not vested due to non-fulfillment of conditions relating to vesting of option as per the Employees Stock Option Scheme.

(8) (a) The option granted to employees shall not be transferable to any other person.

(b) The option granted to the employees shall not be pledged, hypothecated, mortgaged or otherwise encumbered or alienated in any other manner.

(c) Subject to clause (d), no person other than the employees to whom the option is granted shall be entitled to exercise the option.

(d) In the event of the death of employee, while in employment, all the options granted to him till such date shall vest in the legal heirs or nominees of the deceased employee.

(e) In case the employee suffers a permanent incapacity while in employment, all the options granted to him as on the date of permanent incapacitation, shall vest in him on that day.

(f) In the event of resignation or termination of employment, all options not vested in the employee as on that day shall expire. However, the employee can exercise the options granted to him which are vested within the period specified in this behalf, subject to the terms and conditions under the scheme granting such options as approved by the Board.

(9) The Board of Directors shall, inter alia, disclose in the Directors' Report for the year, the following details of the Employees Stock Option Scheme:

(a) options granted;
(b) options vested;
(c) options exercised;
(d) the total number of shares arising as a result of exercise of option;
(e) options lapsed;
(f) the exercise price;
(g) variation of terms of options;
(h) money realized by exercise of options;

(i) total number of options in force;

(j) employee-wise details of options granted to:

(i) key managerial personnel;

(ii) any other employee who receives a grant of options in any one year of option amounting to five percent or more of options granted during that year.

(iii) identified employees who were granted the option, during any one year, equal to or exceeding one percent of the issued capital (excluding outstanding warrants and conversions) of the company at the time of grant;

(10) (a) The company shall maintain a Register of Employee Stock Options in Form No. SH.6 and shall enter therein the particulars of option granted under clause (b) of Sub-section (1) of Section 62.

(b) The Register of Employee Stock Options shall be maintained at the registered office of the company or such other place as the Board may decide.

(c) The entries in the register shall be authenticated by the company secretary of the company or by any other person authorized by the Board for the purpose.

(11) Where the equity shares of the company are listed on a recognized stock exchange, the Employees Stock Option Scheme shall be issued, in accordance with the regulations made by the Securities and Exchange Board of India in this behalf.

The Institute of Chartered Accountants of India has issued guidance note on Accounting for Employee Share-based payments. The Guidance Note has suggested the following guidelines for accounting of ESOPs:

Some employers use share-based payments as a part of remuneration package for their employees. Such payments generally take the terms of Employee Stock Option Plans (ESOPs). The guidance note recognizes that there are two methods of accounting for employee share-based payments viz. the fair value method and the intrinsic value method and permits as an alternative the intrinsic value method with fair value disclosures.

An enterprise should recognize as an expense (except where service received qualifies to be included as part of the cost of an asset) the services received in an equity-settled employee share-based payments plan when it receives the services, with a corresponding credit to an appropriate equity account, say, ‘Stock Option Outstanding Account’. This account is transitional in nature as it gets ultimately transferred to another equity account such as share capital, securities premium account and/or general reserve as recommended in the Guidance Note.

If the shares or stock options granted vest immediately, the employee is not required to complete a specified period of service before becoming unconditionally entitled to those instruments. In the absence of evidence to the contrary, the enterprise should presume that services rendered by the employees as a consideration for the instruments have been received. In this case, on the grant date, the enterprise should recognize services received in full with a corresponding credit to equity account.

- If the shares or stock options granted do not vest until the employee completes a specified period of service, the enterprise should presume that the services to be rendered by the employee as consideration for those instruments would be received in the future, during the vesting period. The enterprise should account for those services as they are rendered by the employee during the vesting period, on a time-proportion basis, with a corresponding credit to the equity account.

- An enterprise should measure the fair value of shares, or stock options granted at the grant date, based on market prices if available, taking into account the terms and conditions upon which those shares
or stock options were granted. If market prices are not available, the enterprise should estimate the fair value of the instruments granted using a valuation technique to estimate what the price of those instruments granted using a valuation technique to estimate what the price of those instruments would have been on the grant date in an arm’s length transaction between knowledgeable, willing parties. The valuation technique should be consistent with generally accepted valuation methodologies for pricing financial instruments (e.g., use of an option pricing model for valuing stock option) and should incorporate all factors and assumptions that knowledgeable, willing market participants would consider in setting the price.

**Employees Stock Option Scheme (ESOS)**

ESOP means a scheme under which the company grants option (a right but not an obligation) to an employee to apply for shares of the company at a predetermined price. This right is exercisable by the employee, during the specified period. Section 2(37) of the Companies Act, 2013 states that the “employee stock option” means the option given to the whole time director, officers or employees of a company which gives such directors, officers or employees the benefit or right to purchase or subscribe at a future date, the securities offered by the company at a predetermined price. The SEBI has issued guidelines for ESOS of listed companies. These guidelines are also applicable for Employee Stock Purchase Scheme (ESPS), which implies a scheme under which the company offers shares to employee as part of public issue or otherwise.

Accounting for ESOP – The option discount (which is also known as fair value or accounting value of options) granted to employees during the accounting period should be treated as compensation to employees. Option discount means the excess of the market value of the share at the date of grant of the option under ESOS over the exercised price of the option (including upfront payment, if any). The option discount should be amortized on a straight-line basis over the vesting period, i.e., the period over which option is exercisable.

Disclosure in the Director’s Report – The Board of Directors shall inter alia disclosure either in the Director’s Report or in the annexure to the Director’s Report the following details of the ESOS:

(a) Options granted;
(b) The pricing formula;
(c) Options vested;
(d) Options exercised;
(e) The total number of shares arising as a result of exercise of option;
(f) Options lapsed;
(g) Variation of terms of options;
(h) Money realized by exercise of options;
(i) Total number of options in force;
(j) Employee-wise details of options granted to:
   (i) Senior managerial personnel;
   (ii) Any other employee who receives a grant in any one year of option amounting to 5% or more of option granted during that year;
   (iii) Identified employees who were granted option, during any one year, equal to or exceeding 1% of the issued capital (excluding outstanding warrants and conversions) of the company at the time of grant;
(k) ‘diluted earnings per share’ pursuant to the issue of shares on exercise of option calculated in accordance with IAS-33.
Equity Shares with Differential Rights

According to Section 43 of the Companies Act, 2013, Equity share capital may be Equity Share Capital with voting right or Equity Share Capital with differential right as to dividend, voting or otherwise.

Rule 4 of the Companies (Share Capital and Debentures) Rules 2014 deals with equity shares with differential rights.

Which Company may issue:

A company limited by shares shall issue equity shares with differential rights as to dividend, voting or otherwise, when it complies with the following conditions, namely:-

(a) The articles of association of the company authorize the issue of shares with differential rights.

(b) The issue of shares is authorized by an ordinary resolution passed at a general meeting of the shareholders. Where the equity shares of a company are listed on a recognized stock exchange, the issue of such shares shall be approved by the shareholders through postal ballot.

(c) The shares with differential rights shall not exceed twenty-six percent of the total post-issue paid up equity share capital, including equity shares with differential rights issued at any point of time.

(d) The company having consistent track record of distributable profits for the last three years;

(e) The company has not defaulted in filing financial statements and annual returns for three financial years immediately preceding the financial year in which it is decided to issue such shares.

(f) The company has no subsisting default in the payment of a declared dividend to its shareholders or repayment of its matured deposits, or redemption of its preference shares, or debentures that have become due for redemption, or payment of interest on such deposits, or debentures or payment of dividend.

(g) The company has not defaulted in payment of the dividend on preference shares or repayment of any term loan from a public financial institution, or State level financial institution, or scheduled Bank that has become repayable or interest payable thereon, or dues with respect to statutory payments relating to its employees to any authority or default in crediting the amount in Investor Education and Protection Fund to the Central Government.

(h) The company has not been penalized by Court or Tribunal during the last three years of any offence under the Reserve Bank of India Act, 1934, the Securities and Exchange Board of India Act, 1992, the Securities Contracts Regulation Act, 1956, the Foreign Exchange Management Act, 1999 or any other special Act, under which such companies being regulated by sectoral regulators.

This may be noted here that the, penalty by regulators itself causes no disqualification.

EXPLANATORY STATEMENT ANNEXED TO NOTICE

The explanatory statement to be annexed to the notice of the general meeting or of a postal ballot shall contain the following particulars, namely:-

(a) The total number of shares to be issued with differential rights;

(b) The details of the differential rights;

(c) The percentage of the shares with differential rights to the total post-issue paid up equity share capital, including equity shares with differential rights issued at any point of time;

(d) The reasons or justification for the issue;

(e) The price at which such shares are proposed to be issued either at par or at a premium;
Lesson 5 – Related Aspects of Company Accounts

(f) The basis on which the price has been arrived at;

(g) In case of

(i) Private placement or preferential issue-

(a) details of total number of shares proposed to be allotted to promoters, directors and key managerial personnel;

(b) details of total number of shares proposed to be allotted to persons other than the promoters, directors and key managerial personnel, and their relationship, if any, with any of the promoters, director or key managerial personnel;

(ii) Public issue-

Reservation, if any, for different classes of applicants including promoters, directors or key managerial personnel;

(h) The percentage of voting right which the equity share capital with differential voting right shall carry to
the total voting right of the aggregate equity share capital;

(i) The scale or proportion in which the voting rights of such class or type of shares shall vary;

(j) The change in control, if any, in the company that may occur consequent to the issue of equity shares
with differential voting rights;

(k) The diluted Earning per Share (EPS) pursuant to the issue of such shares, calculated in accordance
with the applicable accounting standards;

(l) The pre- and post-issue shareholding pattern along with voting rights as per clause 35 of the listing
agreement issued by Security Exchange Board of India from time to time.

Please note here, Clause 35 is specially made applicable to the company issuing equity shares with differential
rights for the purpose of these subrules.

No Conversion:

The company shall not convert its existing equity share capital with voting rights into equity share capital
carrying differential voting rights and vice versa.

Disclosure in Board’s Reports:

The Board of Directors shall, inter alia, disclose in the Board’s Report for the financial year in which the issue of
equity shares with differential rights was completed the following are the details :

(a) The total number of shares allotted with differential rights;

(b) The details of the differential rights relating to voting rights and dividends;

(c) The percentage of the shares with differential rights to the total post-issue equity share capital with
differential rights issued at any point of time and percentage of voting rights which the equity share capital
with differential voting right shall carry to the total voting right of the aggregate equity share capital;

(d) The price at which such shares have been issued;

(e) The particulars of promoters, directors or key managerial personnel to whom such shares are issued;

(f) The change in control, if any, in the company resolution from the issue of equity shares with differential
voting rights;

(g) The diluted Earning per Share (EPS) pursuant to the issue of each class of shares, calculated in
accordance with the applicable accounting standards;
(h) The pre and post issue shareholdings pattern along with voting rights in the format specified under sub-rule (2) of rule 4.

**General Rights available:**

The holders of the equity shares with differential rights shall enjoy all other rights such as bonus shares, and rights shares etc., which the holders of equity shares are entitled to, subject to the differential rights with which such shares have been issued.

**Entry in Register of Members:**

Where a company issues equity shares with differential rights, the Register of Members maintained under Section 88 shall contain all the relevant particulars of the shares so issued along with details of the shareholders.

However, according to the Companies (Share Capital and Debentures) Amendment Rules, 2014 of 18th June 2014, it is hereby clarified that equity shares with differential rights issued by any company under the provisions of the Companies Act, 1956 (1 of 1956) and the rules made thereunder, shall continue to be regulated under such provisions and rules. This means provisions of earlier Act shall continue to apply.

### UNDERWRITING OF SHARES

Underwriting is an agreement, with or without conditions, to subscribe to the securities of a body corporate when existing shareholders of the corporate or the public do not subscribe to the securities offered to them.

When a company goes in for an Initial Public Offer (IPO), it may face certain uncertainty about whether its Offer of shares or other securities will be subscribed in full or not. If the public issue does not get fully subscribed, the project for which the funds are being raised cannot be implemented. As per law, it is required that if the company is not able to collect 90% of the offer amount, then it needs to compulsorily return the money to those who have subscribed to the shares.

To avoid the risk of undersubscription companies may seek the help of a specialized group of risk redeemers called underwriters. The function of the Underwriters is to arrange subscription of floated shares.

If the whole or a certain portion of the shares or debentures of the company are not applied for by the public, the underwriters themselves apply or persuade others to apply for those shares or debentures. The underwriters, as risk takers, and are entitled to get commission at prescribed rates.

It can be easily comprehended that when the floated shares are likely to be undersubscribed, the underwriters come to the forefront. In other cases they remain in the background, acting as catalysts arranger of sale to the investing public.

Before entering into an agreement with the company, the underwriters assess the following:

(a) worth of the public issue;

(b) market response to the issue; and

(c) their own ability to get the issue fully subscribed.

Depending upon the risk assessment of the issue, the underwriters decide on their amount of commission. Owing to under subscription, if the issue is devalues, the underwriters pay up the required amount and deduct their commission from that.

From the viewpoint of the issuer company, the following are generally observed:

(a) While selecting underwriters and finalizing underwriting arrangements, lead merchant bankers shall ensure that the underwriters do not overexpose themselves so that it may become difficult to fulfill underwriting commitments.
(b) The overall exposure of underwriter(s) belonging to the same group or management in an issue shall be assessed carefully by the lead merchant banker.

(c) The lead merchant banker shall satisfy themselves about the ability of the underwriters to discharge their underwriting obligations satisfactorily.

(d) The lead merchant banker shall:
   
   (i) incorporate a statement in the offer document to the effect that in the opinion of the lead merchant banker, the underwriters’ assets are adequate to meet their underwriting obligations;
   
   (ii) Obtain underwriters’ written consent before including their names as underwriters in the final offer document.

(e) In order to ascertain the underwriters’ worth, the lead merchant banker(s) shall undertake a minimum underwriting obligation of 5% of the total underwriting commitment, or Rs. 25 lacs whichever is less.

(f) The outstanding underwriting commitments of a merchant banker shall not exceed 20 times its net worth, any point of time.

(g) With respect to an underwritten issue, the lead merchant banker shall ensure that the relevant details are included in the offer document underwriters.

It should be noted that as per the latest SEBI Guidelines underwriting is not mandatory.

Under the SEBI rules, no person other than a share broker or merchant banker can act as an underwriter unless he holds a certificate granted by SEBI.

Regarding underwriting, the following disclosures should be made in the Offer Document:

(a) Names and addresses of the underwriters and the amount underwritten by them.

(b) Declaration by the Board of Directors of the issuing company that the underwriters have sufficient resources to discharge their respective obligations.

**UNDERWRITING AGREEMENT**

After the determination of the Issue Price and allocation of our Equity Shares but prior to filing of the Prospectus with ROC, our Company will enter into an Underwriting Agreement with the Underwriters for the Equity Shares proposed to be offered through this Issue. It is proposed that pursuant to the terms of the Underwriting Agreement, the BRLMs shall be responsible for bringing in the amount devolved in the event that the Syndicate Members (other than ESL) do not fulfill their underwriting obligations. Pursuant to the terms of the Underwriting Agreement, the obligations of the Underwriters are several and are subject to certain conditions precedent to closing, as specified therein.

**SUB-UNDERWRITERS**

In order to spread the risk of undersubscription, the principal underwriters may enter into subsidiary agreements with subunderwriters. Such agreements are made between the underwriters alone, with the company not being a party thereto. As per agreement, the company pays commission at a prescribed rate to the principal underwriters, who in turn, disburse commission to the sub-underwriters. Sometimes an additional commission is paid to the principal underwriters to encourage sub-underwriting. This is known as over-riding commission. The payment of an over-riding commission enables the company to deal with first one or two underwriters instead of a number of them.

**UNDERWRITING COMMISSION**

It may be paid in cash or in fully paid up shares or debentures or a combination of all these. It is paid on the
issue price of the shares or debentures so underwritten. As per the provision of Section 40 of the Companies Act, 2013, commission is payable, if the following conditions are satisfied:

(i) The payment of the commission is authorized by the articles;

(ii) The commission paid or agreed to be paid does not exceed in the case of shares, five per cent of the price at which the shares are issued or the amount or rate authorized by the articles, whichever is less, and in the case of debentures, two and a half per cent of the price at which the debentures are issued or the amount or rate authorized by the articles, whichever is less;

(iii) The amount or rate per cent of the commission paid or agreed to be paid is -

in the case of shares or debentures offered to the public for subscription, disclosed in the prospectus, and in the case of shares or debentures not offered to the public for subscription, disclosed in the statement in lieu of prospectus, or in a statement in the prescribed form signed in like manner as a statement in lieu of prospectus and filled in before the payment of the commission with the Registrar and, where a circular or notices not being a prospectus inviting subscription for the shares or debentures, is issued, also disclosed in that circular or notice:

(iv) The number of shares or debentures which persons have agreed for a commission to subscribe absolutely or conditionally is disclosed in the manner aforesaid; and

(v) A copy ’If the contract for the payment of the commission is delivered to the Registrar at the time of delivery of the prospectus or the statement in lieu of prospectus for registration.

In this regard, the following points are to be noted:

(1) No underwriting commission is payable on the shares taken up by the promoters, employees, directors, business associates, etc.

(2) Commission is payable on the whole issue underwritten, irrespective of the fact that the whole of the issue may be taken over by the public.

However, as per the guidelines issued by the Stock Exchange division of the Department of Economic Affairs, Ministry of Finance vide their reference No. F-14/1/SE/85, dated 7th May, 1985, the following rates for payment of underwriting commission are in force.

<table>
<thead>
<tr>
<th></th>
<th>On amounts devolving on the underwriters (per cent)</th>
<th>On amounts subscribed by the public (per cent)</th>
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</thead>
<tbody>
<tr>
<td>Equity Shares</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Preference Shares</td>
<td>Convertible and Non-convertible Debentures</td>
<td>2.5</td>
</tr>
<tr>
<td>(a) For amounts upto Rs. 5 lakhs</td>
<td>2.5</td>
<td>1.5</td>
</tr>
<tr>
<td>(b) For amounts in excess of Rs. 5 lakhs</td>
<td>2.0</td>
<td>1.0</td>
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</tbody>
</table>

**FULL AND PARTIAL UNDERWRITING**

When the whole issue is underwritten by the underwriter(s) it is called full underwriting. When a part (say 75%) of the whole issue is underwritten by the underwriter(s) it is called partial underwriting. In this case the company is treated as having underwritten the balance of shares.
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ACCOUNTING ENTRIES

1. For Commission/brokerage due:
   Commission/Brokerage A/c  Dr.
   To Underwriter Account  Dr.
   To Broker Account

2. For payment of Commission/brokerage
   Underwriter Account  Dr.
   Broker Account  Dr.
   To Bank Account [Cheque]
   To Share Capital Account [Shares]
   To Debentures Account [Debentures]

Determination of Liability in respect of Underwriting Contract

The nature of underwriting contract determines the liability of the underwriter. The different types of underwriting contract with their subdivisions can be shown with the help of the following diagram:

1(a) When the Issue is Fully Underwritten [without Firm Underwriting]

If the entire issue has been underwritten by one underwriter, the determination of his liability is very simple. The total number of applications (both marked and unmarked) are deducted from the number of shares underwritten and the resultant figure is treated as a liability of the underwriter. For example, X Ltd. issued 1,00,000 equity shares of Rs. 10 each. The issue was fully underwritten by A. However, the company received applications for 80,000 shares which includes marked applications for 60,000 shares.

Here, A's liability will be 1,00,000- 60,000- 20,000 = 20,000 shares. A would get full credit for the unmarked 20,000 applications.
If the entire issue has been underwritten by a number of underwriters, certain difficulties may arise in respect of division of unmarked applications.

The unmarked applications can be divided between the underwriters in the following two ways.

**Method 1**

Under this method, all unmarked applications are divided between the underwriters in the ratio of gross liability of individual underwriter. For determining the liability of individual underwriter, the following steps are followed:

**Step 1** Compute gross liability (if it has not been given) of individual underwriter on the basis of agreed ratio. For example, X Ltd. issued 1,00,000 Equity shares of Rs. 10 each. The issue was underwritten as:

A-30%; B -40% and C-30%. Here the gross liability will be: A-30% of 1,00,000 = 30,000 Shares; B-40% of 1,00,000 = 40,000 shares C-30% of 1,00,000 = 30,000 shares.

**Step 2** Subtract marked applications from gross liability of respective underwriters.

**Step 3** Determine the number of unmarked applications. (Unmarked application = Total applications received less marked applications). Divide unmarked applications between different underwriters in the ratio of gross liability, as per our example, in the ratio of 3:4:3. If the resultant figures are all positive or zero, then stop here. Now these figures represent the net liability of each underwriter.

If some of the resultant figures are negative, then continue to Step 4.

**Step 4** Add all negative figures and divide the resultant ones between the underwriters having positive figures in the ratio of gross liability inter se (for details see Illustration 3).

Repeat Step 4 unless all figures are non-negative. Now these figures represent the net liability of each underwriter.

**Method 2**

Under this method, all unmarked applications are divided between the underwriters in the ratio of gross liability less marked applications. For determining the liability of individual underwriter following steps are followed:

**Step 1** Compute gross liability in the usual manner (if it has not been given).

**Step 2** Subtract marked applications from gross liability of respective underwriters. If some of the resultant figures are negative, add all negative figures and divide their sum in the ratio of gross liability inter se (for details, See Illustration 3 alternative solution).

**Step 3** Determine the number of unmarked applications. Divide unmarked applications between different underwriters in the ratio of gross liability less marked applications, i.e., the resultant figures of Step 2. If the resultant figures of Step 3 are all positive or zero, stop here. Now these figures represent the net liability of each underwriter.

If some of the resultant figures are negative, then continue to Step 4.

**Step 4** Add all negative figures and divide their sum between the underwriters having positive figures in the same ratio of Step 3. Repeat Step 4 unless all figures are non-negative. Now these figures represent the net liability.

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**LESSON ROUND-UP**

- When a company has substantial cash resources, it may like to buy its own shares from the market particularly when the prevailing rate of its shares in the market is much lower than the book value or what the company perceives to be its true value.
- As per Section 68, 69, 70 of the Companies Act, 2013 states that a company may purchase its own
shares or other specified securities out of its free reserves, and the proceeds of any other shares or other specified securities.

- Buy-back is permissible: (a) from the existing security holders on a proportionate basis through the tender offer; or (b) from the open market.

- Regulation 10(1) of the Securities and Exchange Board of India provides that a company shall, as and by way of security for performance of its obligations on or before the opening of the offer of re-purchase, deposit in an escrow account such sum as is specified in 10(2).

- A company, other than a listed company, which is not required to comply with Securities and Exchange Board of India Employee Stock Option Scheme Guidelines shall not offer shares to its employees under a scheme of employees' stock option (hereinafter referred to as “Employees Stock Option Scheme”)

- ESOP means a scheme under which the company grants option (a right but not an obligation) to an employee to apply for shares of the company at a predetermined price. This right is exercisable by the employee, during the specified period.

- Section 2(37) of the Companies Act, 2013 states that the “employee stock option” means the option given to the whole time director, officers or employees of a company which gives such directors, officers of employees the benefit or right to purchase or subscribe at a future date, the securities offered by the company at a predetermined price

- According to Section 43 of the Companies act, 2013, Equity share capital may be Equity Share Capital with the voting right or Equity Share Capital with differential right as to dividend, voting or otherwise.

- Rule 4 of the Companies (Share Capital and Debentures) Rules 2014 deals with equity shares with differential rights.

- The company shall not convert its existing equity share capital with voting rights into equity share capital carrying differential voting rights and vice versa.

- The holders of the equity shares with differential rights shall enjoy all other rights, such as bonus shares, rights shares etc., which the holders of equity shares are entitled to, subject to the differential rights with which such shares have been issued

- Where a company issues equity shares with differential rights, the Register of Members maintained under section 88 shall contain all the relevant particulars of the shares so issued along with details of the shareholders.

- Underwriting is an undertaking or guarantee given by the underwriters to the company that the shares or debentures offered to the public will be subscribed for in full.

- An underwriting agreement may be: Complete Underwriting, Partial Underwriting and Firm Underwriting.

- Applications bearing the stamp of the respective underwriters are called marked applications and the applications received directly by the company which do not bear any stamp of the underwriters are known as unmarked applications.

- Debentures may be issued at par, or at a premium, or at a discount.

- Debentures may be issued by a company for cash, for consideration other than cash, and as collateral security.

- The issue of debentures to vendors is known as issue of debentures for consideration other than cash.

- The term ‘Collateral Security’ implies additional security given for a loan. When a company takes a loan
from bank or insurance company, it may issue its own debentures to the lender as collateral security against the loan in addition to any other security that may be offered such an issue of debentures is known as “Debentures Issued as Collateral Security.

- A company may issue debentures on any specific condition as to its redemption, such as: issued at par and redeemable at par, issued at a discount redeemable at par, issued at a premium redeemable at par, issued at par redeemable at a premium, issued at discount, but redeemable at premium.

- When a company issues debentures it undertakes to pay interest thereon at a fixed percentage. The payment of interest on the debt is obligatory on the part of the company issuing them irrespective of the fact whether the company earns profit or not and the interest payable on debentures is a charge against the profits of the company.

- Discount on issue of debentures is a capital loss to the company and it is required to be shown on the assets side of the Balance Sheet under the heading “Other Current or Non-Current Asset” until it is written off.

- When a company issues debentures at par or at a discount which are redeemable at a premium, the premium payable on redemption of the debentures is treated as capital loss.

- Redemption of debentures refers to the discharge of the liability in respect of the debentures issued by a company. Debentures can be redeemed at any time either at par or at a premium or at a discount.

- Debentures may be redeemed by way of: annual drawings, payment in one lump sum at the expiry of a specified period or at the option of the company at a date within such specified period, purchase of debentures in the open market and conversion into shares.

- Interest on debentures is generally paid half-yearly to the holders on certain specified dates. If the purchase price for the debentures includes interest for the expired period, the quotation is said to be “Cum-interest”, on the other hand, the purchase price for the debentures excludes the interest for the expired period, the quotation is said to be “Ex-interest”.

**SELF TEST QUESTIONS**

1. In April 2009, a company issues 13% Rs 20,00,000 debentures at Rs 96 but redeemable at Rs 103. Redemption will be carried out by annual drawings of Rs 4 lacs (face value) commencing at the end of March 2014. What do you recommend as the amount to be charged to the profit and loss account, apart from that of interest?

   [Ans.: Rs 20,000 p.a. from March 2010 to March 2014, Rs. 16,000 in March 2015, Rs 12,000 in March 2016, Rs. 8,000 in March 2017, Rs 4,000 March in 2018].

2. Calculate the amount of discount to be written off each year on the debentures of Rs 60,00,000 issued on 1.1.2014 at a discount of 5% repayable in annual drawings of Rs 10,00,000 each year. Accounting period ends on 31st December.

   [Ans.: Ratio - 6 : 5 : 4 : 3 : 2 : 1; Discount Amount : I - Rs 85,714; II - Rs 71,429; III - Rs 57,143; IV - Rs 42,857; V - Rs 28,571 and VI - Rs 14,286].

3. (a) A company issues 11% Rs 10,00,000 debentures, repayable at the end of 10 years at a premium of 5%. It decides to establish a sinking fund to take care of the redemption. Investments in readily marketable securities yield 6% per annum. Sinking Fund Table shows that Rs 0.075868 annually is required to produce Rs 1 at the end of 10 years @ 6%. What is the annual amount that has to be set aside and what account will be debited for credit to the Sinking Fund (Debenture Redemption Fund) A/c?
(b) If investments are made to the nearest Rs 100, how much will be invested at the end of the 3rd year in the above case?

[Ans.: (a) Rs 79,661.40, debit Profit & Loss Appropriation A/c; (b) Rs 89,500].

4. P. Ltd. issued Rs.10,00,000 13.5% debentures at a discount of 5%; the debentureholders have an option of converting the amount into Rs. 10 equity shares at a premium of 10%. A debentureholder holding Rs 40,000 debentures wishes to exercise the option. How many shares will he get?

[Ans.: 3,454].

5. In 2010 Gee Ltd. issued 10% Rs. 20,00,000 debentures at a discount of 10%; the debentures were redeemable in 2014. In 2014 the company gave the debentureholders the option of converting the debentures into equity shares at a premium of 25%. One debentureholder, holding Rs. 1,00,000 debentures, wants to exercise the option. What is the face value of the shares that he will get?

[Ans.: Rs 80,000].
Lesson 6
Financial Statements Interpretation

LESSON OUTLINE
- Preparation and Presentation of Financial Statements
- Quarterly, Halfyearly and Annual Financial Statement pursuant to SEBI Listing Regulations 2015
- LODR & applicable accounting standards
- Depreciation provisions and Reserves
- Determination of Managerial Remuneration
- Corporate Social Responsibility spend
- Various disclosures under the Companies Act, 2013
- Related party and segment reporting
- Audit Queries
- How to Read and interpret Financial Statements
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES
- Understand the meaning and significance of framework of preparation and presentation of Financial Statement
- Learn objectives of financial statement
- Understand the Quarterly / Half Yearly / Annual Compliances under SEBI Listing Regulations 2015
- Understand the LODR under SEBI listing regulation 2015
- To learn the depreciation provisions and reserves.
- To learn the remuneration allowed to managerial person
- To learn how much corporate should spend on CSR from the profit earned
- Understand the various disclosures under the Companies Act, 2013
- To learn the related party disclosures and segment reporting
- Understand in which condition audit queries are raised.
- Understand how to read and interpret Financial Statements
INTRODUCTION

In order to ascertain the financial status of the business every enterprise prepares certain statements known as financial statements. Financial Statements represent a formal record of the financial activities of an entity. These are written reports that quantify the financial strength, performance and liquidity of a company. Financial Statements reflect the financial effects of business transactions and events on the entity.

Financial Statement Preparation

Financial statements are reports prepared and issued by company management to give investors and creditors additional information about a company’s performance and financial standings. The four general purpose of financial statements include:

- Income Statement
- Balance Sheet
- Statement of Stockholders Equity
- Statement of Cash Flow

These reports are prepared in this order and are issued to the public as a full set of statements. This means they are not only published together, but they are also designed and intended to be read and used together. Since each statement only gives information about specific aspects of a company’s financial position, it is important that these reports are used together.

For instance, the Balance Sheet shows the debt levels of the company, but it doesn’t show what the debt coverage costs. Both the Balance Sheet and Income Statement are needed to calculate the debt coverage ratio for investors and creditors to see a true picture of the debt burden of a company.

The purpose of these reports is to provide useful financial information to users outside of the company. In essence, these reports complete the fundamental purpose of financial accounting by providing information that is helpful in the financial decision-making process.

Understanding these business financial statements is the first critical step investors, creditors, and even you can take to learn about a company’s earnings, profitability, asset management, financial leverage, cash flow, and current shareholders’ stake. Once you understand all of these aspects of a company, you can gauge its relative financial health and determine whether it is worth investing in or loaning money to.

How are Financial Statements Prepared

Preparing general-purpose financial statements can be simple or complex depending on the size of the company. Some statements need footnote disclosures, while others can be presented without any footnotes. Details like this generally depend on the purpose of the financial statements.
Financial statements are prepared by transferring the account balances on the adjusted trial balance to a set of financial statement templates.

**Who Issues Financial Statements?**

Companies issue different types of business financial statements for a variety of reasons at a variety of times during the year. Public companies are required to issue audited financial statements to the public at least every quarter. These regulated reports must meet guidelines as stipulated by different laws. Non-public or private companies generally issue financial sheets to banks and other creditors for financing purposes. Many creditors do not agree to loan funds unless it can prove that it is financially sound enough to make its future debt payments.

Both public and private companies issue at least 4 financial statements to attract new investors and raise funds funding for expansions.

**DIFFERENT TYPES OF FINANCIAL STATEMENTS**

**Interim Statements**

Financial statements that are issued for the time periods smaller than one year are called interim statements, because they are used as temporary statements to judge a company’s financial position, until the full annual statements are issued.

Interim financial statements are most commonly issued quarterly or semi-annually, but it is not uncommon for companies to issue monthly reports to creditors as part of their loan covenants. Quarterly statements, as the name implies, are issued every quarter and only include financial data from that three-month span of time. Likewise, semi-annual statements include data from a six-month span of time.

**Annual Statements**

The annual financial statement form is prepared once a year and covers a 12-month period of financial performance. Generally, these statements are issued at the end of a company’s fiscal year instead of a calendar year. A company with a June year-end would issue annual statements in July or August; whereas, a company with a December year-end would issue statements in January or February.

**Who Uses Financial Statements and What Are They Used For?**

Financial statements are mainly prepared for external users. There users are people who are outside of the company or organization itself and need information about it to base their financial decisions on. These external users typically fall into four main categories:

- Investors
- Creditors
- Competitors
- Regulators

Investors and creditors analyze these sets of statements to base their financial decisions on. They also look at extra financial reports like financial statement notes and the discussion done in management meetings.

The Income Statement and Balance Sheet are compared with each other to see how efficiently a company is using its assets to generate profits. Company’s debt and equity levels can also be examined to determine whether the companies are properly funding its operations and expansions.

Most investors and creditors use financial ratios to analyze these comparisons. There is almost no limit to the amount of ratios that can be combined for analysis purposes.
These ratios by themselves rarely give outside users and decision makers enough information to judge whether or not a company is fiscally sound. However, Investors and creditors generally compare different companies’ ratios to develop an industry standard or a benchmark to judge a company’s performance.

Financial statement template and form

Here’s a sample financial statement template that shows the order of how each statement works together to report the full economic position of a company beginning with the Balance Sheet.

As you can see, everything starts with the prior period’s Balance Sheet. This is the starting point for all of the reports because it shows the asset, liability, and equity accounts at the beginning of the period. From this starting point, we can add or subtract the operating activities reported on the income statement. This includes all revenues and expenses that the company incurred during the year.

We also need to add or subtract the amount of money investors put or contributed or withdrew from the company during the year. This information is reported on the statement of stockholder’s equity for corporations or the statement of partner’s equity for partnerships. Once all operating, financing, and investing activities are added to the initial Balance Sheet, the investors, creditors, and management can analyze the ending balance sheet and see how well the company has performed during the period.

PRESENTATION OF FINANCIAL STATEMENT (International Accounting Standard 1) (IAS 1)

Presentation of financial statements prescribes the basis for presentation of general purpose financial statements, to ensure comparability both with the entity’s financial statements of earlier periods and with the financial statements of other entities. To achieve this objective, IAS 1 sets out overall requirements for the presentation of financial statements, guidelines for their structure and minimum requirements for their content.

(A) Statement of financial position

Information to be presented in the statement of financial position

- IAS 1 paragraphs 54 provide the minimum line-items to be included on the face of the statement of financial position.

- Additional line-items, headings and subtotals shall be presented on the face of the statement of financial position, if relevant to understand the entity’s financial position. There is no prescribed order or format in which items are to be presented. However the guidelines are as follows:
Line-items are included when the size, nature or function of an item or aggregation of similar items is such that separate presentation is relevant to an understanding of the entity’s financial position.

- The descriptions used and the ordering of items or aggregation of similar items may be amended according to the nature of the entity and its transactions, to provide information that is relevant to an understanding of the entity’s financial position.

### Current / Non-current distinction

An entity shall present current and non-current assets, as well as current and non-current liabilities as separate classifications on the face of its statement of financial position, unless a presentation based on liquidity provides reliable information that is more relevant.

A presentation of assets and liabilities in increasing or decreasing order of liquidity provides information that is reliable and relevant for some entities, such as financial institutions. The current/non-current presentation may not be relevant for a financial institution because the entity does not supply goods or services within a clear operating cycle.

### Current Assets

An asset shall be classified as current when it satisfies any of the following criteria:

- It is expected to be realized in, or is intended for sale or consumption in, the entity’s normal operating cycle;
- It is held primarily for the purpose of being traded;
- It is expected to be realized within 12 months after the reporting date;
- It is cash or a cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.

### Current Liabilities

A liability is classified as current when it satisfies any of the following criteria:

- It is expected to be settled in the entity’s normal operating cycle (i.e., may be more than 12 months);
- It is held primarily for the purpose of being traded;
- It is due to be settled within 12 months after the reporting date.
- The entity does not have an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

### Information to be presented in the statement of financial position or in the notes

- Detailed Information about each class of share capital or category of equity for entities without share capital;
- A description of the nature and purpose of each reserve within equity.

### (B) Statement of profit or loss and other comprehensive income

An entity presents all items of income and expense recognized in a period:

- in a single statement of profit or loss and other comprehensive income; or
- in two statements:
i. a statement displaying components of profit or loss (separate statement of profit or loss); and
ii. a second statement beginning with profit or loss and displaying components of other comprehensive income (statement of comprehensive income).

Profit or Loss for the period

- All items of income and expense recognized in a period shall be included in profit or loss unless an IFRS requires otherwise.
- An entity shall not present any items of income and expense as extraordinary items, either on the face of the statement of profit or loss or in the notes.

Information to be presented in the profit or loss section or the statement of profit or loss

- IAS 1 provides a list of items that must be presented in the profit or loss section or the statement of profit or loss.
- IAS 1 provides examples of statement of profit or loss formats to be adopted by entities unless an alternative statement of profit or loss format is more relevant to users in understanding the entity's financial performance.

Information to be presented in other comprehensive income section

- The other comprehensive income section presents line-items for amounts of other comprehensive income in the period, classified by nature (including share of the other comprehensive income of associates and joint ventures accounted for using the equity method) and grouped into those that, in accordance with other IFRSs:
  - Will not be reclassified subsequently to profit or loss; and
  - Will be reclassified subsequently to profit or loss when specific conditions are met.

Information to be presented either in the statement of profit or loss and other comprehensive income or in the notes

- Separate disclosure of the nature and amount of each material item of income and expense;
- An analysis of expenses classified either by the nature of expenses or their function within the entity, whichever provides information that is reliable and more relevant;
- The amount of income tax relating to each component of other comprehensive income.

Additional line-items, headings and subtotals are presented in the statement of profit or loss and other comprehensive income if relevant to the understanding of the entity's financial performance.

(C) Statement of changes in equity

Information to be presented in the statement of changes in equity

- Total comprehensive income for the period, showing separately total amounts attributable to owners of the parent and to non-controlling interests.
- For each component of equity, the effects of retrospective application or retrospective restatement recognized in accordance with IAS 8.
- For each component of equity, a reconciliation between the carrying amount at the beginning and the end of the period, separately disclosing changes resulting from:
– profit or loss
– other comprehensive income
– transactions with owners in their capacity as owners, showing separately contributions by and distributions to owners and changes in ownership interests in subsidiaries that do not result in a loss of control.

**Information to be presented either in the statement of changes in equity or in the notes**

- For each component of equity, an analysis of other comprehensive income by item
- The amounts of dividends recognized as distribution to owners during the period, and the related amount of dividends per share.

**(D) Statement of cash flows**

IAS 7 Cash flow statement sets out requirements for the presentation of the cash flow statement and related disclosures.

**(E) Note disclosures**

The following should be included in the notes to the financial statements:

- Information about the basis of preparation of the financial statements (e.g., going concern or in liquidation) and the specific accounting policies used;
- Information required by International Financial Reporting Standards (IFRS), or that is relevant to the understanding of the statements that is not presented elsewhere in the financial report;
- Significant accounting policies, including measurement bases and relevant policies to the understanding the financial report;
- The judgments, apart from those involving estimations, that management has made in the process of applying the entity’s accounting policies and that have the most significant effect on the amounts recognized in the financial statements;
- Key assumptions concerning the future and other key sources of measurement uncertainty that have a significant risk of causing material adjustments to the carrying amounts of assets and liabilities in the next twelve months;
- Information that enables users of its financial statements to evaluate the entity’s objectives, policies and processes for managing capital.

**DEPRECIATION PROVISIONS & RESERVES**

**Meaning and Nature of Depreciation:**

Depreciation may be defined as the gradual reduction in the value of an asset due to wear and tear, like in the case of physical assets, building and such as machinery, or by mere passing of time as in the case of lease, patent and copyright.

Proper depreciation must be charged to revenue and deducted from the cost of an asset in order to find out its correct working value to the business.

There is a misconception in the minds of many about the real nature and implications of depreciation. It should be remembered that provision for depreciation is not a safeguard against actual diminution in value, because no amount of such provision can stop the physical deterioration due to use or prevent the passing of time.
The real idea behind depreciation is to make adequate arrangement for replacement of an asset on its becoming useless or on the expiry of its normal life, by setting aside a part of the profits every year and allowing it to accumulate. The amount so provided may be either merged in the working capital of the business or invested outside so as to provide a ready fund of money unaffected by any deterioration in the financial condition of the business that may prevent the payment of a requisite sum out of liquid resources at the time of replacement.

### Need or objectives of providing Depreciation

1. **Ascertaining true profit or loss:**
   - (i) True profit of an enterprise can be ascertained when all costs incurred for the purpose of earning revenues have been debited to the profit and loss account.
   - (ii) Fall in the value of assets used in business operations is a part of the cost and should be shown in the profit and loss account of concerned accounting period.
   - (iii) Keeping this in view, depreciation must be debited to profit & loss account, since loss in value of fixed assets is also an expense like other expenses.

2. **Presentation of True and Fair value of assets:** If depreciation is not provided, the value of assets shown in the Balance Sheet will not present the true and fair value of assets because assets are shown at the cost price though actual value is less than the cost price of the assets.

3. **To ascertain the accurate cost of the Production:** Depreciation is an item of expense, the correct cost of production cannot be calculated unless it is also taken into consideration. Hence, depreciation must be provided to ascertain the correct cost of production.

4. **Computation of correct income tax:**
   - (i) Income tax of an enterprise is determined after charging all costs of production.
   - (ii) If depreciation is not charged, the profits will be higher and the income tax will also be higher.
   - (iii) If depreciation is charged, tax liability gets reduced.

5. **Provision of funds and replacement of assets:** Depreciation is a non-cash expense. So that amount of depreciation charged to profit and loss account is retained in business every year. These funds are available for replacement of the assets when its useful life is over.

### Methods of providing depreciation

1. **Straight Line Method**
   - (i) This method is also known as ‘original cost method’.
   - (ii) Under this method, depreciation is charged at fixed percentage on the original cost of the asset throughout its estimated life.
   - (iii) Under this method, the amount of depreciation remains uniform from year after year. That is why this method is also known as ‘Fixed Installment Method’ or ‘Equal installment method’.
   - (iv) The annual amount of depreciation can be easily calculated by the following formula:
     \[
     \text{Annual Depreciable} = \frac{\text{Original Cost} - \text{Estimated scrap value}}{\text{Estimated Life in year}}
     \]

**Examples** A firm purchases a machine for Rs. 2,25,000 on April 1, 2013. The expected life of this machine is 5 years. After 5 years the scrap of this machine would be realized at Rs. 25,000. Under straight line method, the amount of depreciation can be calculated as under:
Annual Depreciable = \( \frac{2,25,000 - 25,000}{5} = 40,000 \)

Hence 40,000 will be charged every year as depreciation on this machine.

2. **Diminishing Balance Method**: Under this method, depreciation is charged as a fixed percentage on the book value of the asset every year. In first year the depreciation will be charged at the end of the year on the total cost the asset.

**Example.** A machine is purchased for Rs. 2,00,000 on April 1 2009. It is decided to charge depreciation on this machine @ 10% p.a. The amount of depreciation for first four years by using both the methods (Straight Line Method and Diminishing Balance Method) is shown as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>Book Value</th>
<th>SLM Dep. @ 10%</th>
<th>Book Value</th>
<th>DM Dep. @ 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-10</td>
<td>20,000</td>
<td>2,000</td>
<td>20,000</td>
<td>2,000</td>
</tr>
<tr>
<td>2010-11</td>
<td>18,000 (20,000 - 2,000)</td>
<td>2,000</td>
<td>18,000 (20,000 - 2,000)</td>
<td>1,800</td>
</tr>
<tr>
<td>2011-12</td>
<td>16,000 (18,000 - 2,000)</td>
<td>2,000</td>
<td>16,200 (18,000 - 1,800)</td>
<td>1,620</td>
</tr>
<tr>
<td>2012-13</td>
<td>14,000 (16,000 - 2,000)</td>
<td>2,000</td>
<td>14,580 (16,000 - 1,620)</td>
<td>1,458</td>
</tr>
</tbody>
</table>

Hence, in Straight Line Method amount of depreciation is same but in Diminishing Balance Method amount of depreciation goes on decreasing every year. Depreciation can be recorded by crediting it to the Assets Account.

**Illustration 1.** On January 1, 2013, a firm bought a machine for Rs. 90,000 and spend Rs. 6,000 on its installation, and Rs. 4,000 on its transportation. It was decided to charge depreciation @ 10% on Straight Line Method. Books are closed on December 31st each year. Show Machinery Account for the years 2013 to 2015.

**Solution:**

**Machinery Account**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>J.F.</th>
<th>Rs.</th>
<th>Date</th>
<th>Particulars</th>
<th>J.F.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan. 1</td>
<td>To Bank A/c</td>
<td>2013</td>
<td>90,000</td>
<td>Dec. 31</td>
<td>By Depreciation A/c</td>
<td>2013</td>
<td>10,000</td>
</tr>
<tr>
<td>Jan. 1</td>
<td>To Cash A/c</td>
<td>2013</td>
<td>6,000</td>
<td>Dec. 31</td>
<td>By Balance c/d</td>
<td>2013</td>
<td>90,000</td>
</tr>
<tr>
<td>Jan. 1</td>
<td>To Cash A/c</td>
<td>2013</td>
<td>4,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>1,00,000</strong></td>
</tr>
</tbody>
</table>

| 2014       |                   |      |      | 2014       |                   |      |      |
| Jan. 1     | To Balance b/d    | 2014 | 90,000 | Dec. 31   | By Depreciation A/c | 2014 | 10,000 |
|            |                   |      |      | Dec. 31   | By Balance c/d    | 2014 | 80,000 |
|            |                   |      |      |            |                   |      | **90,000** |

| 2015       |                   |      |      | 2015       |                   |      |      |
| Jan. 1     | To Balance b/d    | 2015 | 80,000 | Dec. 31   | By Depreciation A/c | 2015 | 10,000 |
|            |                   |      |      | Dec. 31   | By Balance c/d    | 2015 | 70,000 |
|            |                   |      |      |            |                   |      | **80,000** |

**Illustration 2.** On the basis of information given in Illustration 1, show Machinery Account for the years 2013 to 2015 if depreciation is charged @ 10% on Diminishing Balance Method.
Solution:

**Machinery Account**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>J.F.</th>
<th>Rs.</th>
<th>Date</th>
<th>Particulars</th>
<th>J.F.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>Jan. 1</td>
<td>To Bank A/c</td>
<td>90,000</td>
<td>Jan. 1</td>
<td>To Bank A/c</td>
<td>90,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dec. 31</td>
<td>By Depreciation A/c</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jan. 1</td>
<td>To Cash A/c</td>
<td>6,000</td>
<td>Dec. 31</td>
<td>By Balance c/d</td>
<td>90,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jan. 1</td>
<td>To Cash A/c</td>
<td>4,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,00,000</td>
</tr>
<tr>
<td>2014</td>
<td>Jan. 1</td>
<td>To Balance b/d</td>
<td>90,000</td>
<td>Jan. 1</td>
<td>To Balance b/d</td>
<td>90,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dec. 31</td>
<td>By Depreciation A/c</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dec. 31</td>
<td>By Balance c/d</td>
<td>81,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>90,000</td>
</tr>
<tr>
<td>2015</td>
<td>Jan. 1</td>
<td>To Balance c/d</td>
<td>81,000</td>
<td></td>
<td></td>
<td></td>
<td>81,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dec. 31</td>
<td>By Depreciation A/c</td>
<td>8,100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dec. 31</td>
<td>By Balance c/d</td>
<td>72,900</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>81,000</td>
</tr>
</tbody>
</table>

**Illustration 3**: On April 1, 2013 Kannu bought machinery costing Rs.80,000. On July 1, 2015 machinery was sold for Rs.40,000. Prepare Machinery Account from April, 1 2013 till July 1, 2015 assuming depreciation was charged @10% per annum on March 31, every year on the basis of Original Cost Method.

Solution:

**Machinery Account**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>J.F.</th>
<th>Rs.</th>
<th>Date</th>
<th>Particulars</th>
<th>J.F.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>Apr. 1</td>
<td>To Bank A/c</td>
<td>72,000</td>
<td>Mar. 31</td>
<td>By Depreciation A/c</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar. 31</td>
<td>By Balance c/d</td>
<td>72,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>80,000</td>
</tr>
<tr>
<td>2014</td>
<td>Apr. 1</td>
<td>To Balance b/d</td>
<td>72,000</td>
<td>Mar. 31</td>
<td>By Depreciation A/c</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar. 31</td>
<td>By Balance c/d</td>
<td>64,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>72,000</td>
</tr>
<tr>
<td>2015</td>
<td>Apr. 1</td>
<td>To Balance b/d</td>
<td>64,000</td>
<td>July 1</td>
<td>By Bank A/c</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>July 1</td>
<td>By Depreciation A/c</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>July 1</td>
<td>By Loss on sale of March A/c</td>
<td>22,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64,000</td>
</tr>
</tbody>
</table>

**Illustration 4**: On the basis of information given in Illustration 3, prepare Machinery Account assuming depreciation was charged @15% per annum on reducing installment method.
Solution:

Machinery Account

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>J.F</th>
<th>Rs.</th>
<th>Date</th>
<th>Particulars</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>To Bank A/c</td>
<td></td>
<td>80,000</td>
<td>Mar. 31</td>
<td>By Depreciation A/C</td>
<td>12,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Balance C/d</td>
<td>68,000</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td>80,000</td>
<td></td>
<td></td>
<td>80,000</td>
</tr>
<tr>
<td>April 1</td>
<td>To Balance b/d</td>
<td></td>
<td>68,000</td>
<td>Mar. 31</td>
<td>By Depreciation A/c</td>
<td>10,200</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Balance c/d</td>
<td>57,800</td>
</tr>
<tr>
<td>April 1</td>
<td>To Balance b/d</td>
<td></td>
<td>68,000</td>
<td></td>
<td></td>
<td>68,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Bank A/c</td>
<td>40,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>57,800</td>
<td>Jul. 1</td>
<td>By Depreciation A/c</td>
<td>2168</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Loss on Sale</td>
<td>15,632</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>of Machinery</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>57,800</td>
<td></td>
<td></td>
<td>57,800</td>
</tr>
</tbody>
</table>

There is another method of charging for Depreciation. In this method, provision for Depreciation Account is opened and depreciation is charged in this account instead of Asset Account.

In this method the balance of Asset Account remains same throughout its useful life. Provision for depreciation is shown in the liabilities side of the Balance Sheet.

Provisions

- Provisions is to be made is respect of a liability which is certain to be incurred, but where accurate amount is not known.
- It is charged in the Profit and Loss Account on an estimate basis. It should be clearly understood that if the amount of a known liability can be determined with reasonable accuracy, it can not be a provision.


Reserves

- Reserves are the amount set aside out of profits. It is an appropriation of profits and not a charge on the profits.
- The amount of profit retained is used in the business when difficult time comes. Since reserves are neither expenses nor losses, so these are not charged to Profit & Loss Account rather these are debited to Profit & Loss Appropriation Account which is prepared after Profit and Loss Account.
- Reserves are also known as ‘Plough Back of Profits’.
- Reserves are created to strengthening the financial positions of the business enterprise.
- Examples are General Reserves, Divided Equalization Reserves etc.
- If the amount of reserve is invested outside the business, it is called ‘Reserve Fund’.
- Creation of reserve does not reduce the net profit but reduces only the divisible profits.

Examples of Reserves: -i) Profit on sale of fixed assets.
ii) Profit on revaluation of assets and liabilities.

iii) Securities premium earned on issue of share or debentures.

iv) Profit on the purchase of running business.

v) Profit earned on forfeiture of shares.

vi) Profit on redemption of debentures.

vii) Profit prior to the incorporation of a company.

**DETERMINATION OF MANAGERIAL REMUNERATION**

Managerial persons implies Managing Director, Whole-time Director, Part-time Directors and managers who shall be paid remuneration subject to and in accordance with the provisions of Section 197 of the Companies Act, 2013. As compared to various sections and chapters, viz., Section 198, 309, etc., of Companies Act, 1956 which deals with managerial remunerations separately. The new Act has solved this issue by consolidating all provisions under a single provision of 197.

**Applicability of Provisions to Whom**

Section 196 deals with appointment of Managerial Personnel and is applicable to private as well as public companies; while Section 197 which deals with remuneration payable to managerial personnel is applicable to public companies only. Schedule V is partly applicable to private companies (i.e., in relation to Part I that deals with appointment) and partly not applicable to private companies (i.e., Part II that deals with remuneration).

**Definition and Composition of Word Managerial Remuneration**

The managerial remuneration shall be payable to a person appointed within the meaning of Section 196 of the Companies Act, 2013. Under the Companies Act, 2013 the provisions of the payment of managerial remuneration are governed by Section 197, 198, 199 and Schedule V. The word remuneration is defined under Section 2 (78) of Companies Act, 2013, which says that “remuneration” means any money or its equivalent given or passed to any person for services rendered by him and includes perquisites as defined under the Income Tax Act, 1961. Section 17(2) of Income Tax Act, 1961 has given an inclusive definition of the term “perquisite”. This clause comprises eight sub-clauses followed by two provisos, and they deal with the following perquisites:

1. **Value of rent-free accommodation provided to the assessee by his employer.**
2. **Value of any concession in respect of rent respecting any accommodation provided to the assessee by his employer.**
3. **The value of any benefit or amenity granted or provided free of cost or at a concessional rate to employee directors; or to employees who have substantial interest and certain specified employees with some exceptions.**
4. **Sums paid by the employer in respect of any obligation which, but for such obligation, would have been payable by the assessee.**
5. **Sums payable by the employer to effect an assurance on the life of the assessee-employee or to effect a contract for an annuity.**
6. **w.e.f assessment year 2010-11, value of securities / sweat equity shares allotted or transferred by the employer or former employer to the employee.**
7. **w.e.f assessment year 2010-11 a contribution made by an employer to an approved superannuation fund to the extent it exceeds Rs 1 lakh.**
8. Value of any other fringe benefit or amenity as may be prescribed.

9. The first provision states that certain medical benefits are not treated as perquisites in certain specific situations.

Any expenditure incurred by the company to affect any insurance on the life of, or to provide any pension, annuity or gratuity for, any of the persons aforesaid or spouse or child shall be included in managerial remuneration.

We can say that definition of remuneration as well as perquisites are inclusive in nature and hence it covers every amount that the company pays or spends for or for the benefit of a director, in whatever form and by whatever name.

Moreover, any remuneration for services rendered by any such director who of is a professional nature shall not be included in the managerial remuneration. Further, a director may receive remuneration by way of a fee for each meeting of the Board, or a committee thereof attended by him.

Where if insurance is taken by a company on behalf of its key Managerial Personnel for indemnifying against any liability in respect of any negligence, default, misfeasance, breach of duty or breach of trust for which they may be guilty in relation to the company, the premium paid on such insurance shall not be treated as part of remuneration. But if such a key Managerial Personnel is found guilty then such insurance shall be treated as the income part of remuneration.

If a manager or any director enjoys benefit or amenity without the company incurring any expenditure therefor, such benefit or amenity may not be included in the managerial remuneration.

An Independent Director shall not be entitled to receive stock option. However, in case of other directors, stock options would be part of remuneration.

### Remuneration Allowed to Managerial Personnel

Section 197 of the Companies Act, 2013 provides a way to pay managerial remuneration in case company is having adequate profits. A Public Company can pay remuneration to its directors including Managing Directors and Whole-time Directors, and its managers which shall not exceed 11% of the net profit as calculated in a manner laid down in Section 198 of the Companies Act, 2013. Wherein a company in which there is one Managing Director; Whole-time Director or manager the remuneration payable shall not exceed 5% of net profits, and where there are more than one such Directors remuneration payable shall not exceed 11 % of the net profit.

### Maximum Remuneration Payable by a Company to its Managerial Personnel

If a company wants to pay remuneration in excess of the above payable limit it have to follow Schedule V of the Companies Act, 2013.

Part II of Schedule V (earlier Schedule XIII) – Remuneration payable by a company in case where there is no profit or these is an inadequacy of profit is given below :

<table>
<thead>
<tr>
<th>Where Effective Capital is</th>
<th>Limit of yearly Remuneration payable shall not exceed (Rupees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Negative or less than 5 crore</td>
<td>30 lakhs</td>
</tr>
<tr>
<td>ii) 5 Crores and above but less than Rs 100 Crores</td>
<td>42 lakhs</td>
</tr>
<tr>
<td>iii) 100 crores and above but less than 250 crores</td>
<td>60 lakhs</td>
</tr>
<tr>
<td>iv) 250 Crores and above</td>
<td>60 lakhs plus 0.01% of the effective capital in excess of Rs. 250 crores.</td>
</tr>
</tbody>
</table>
A company with inadequate profit may pay to its Managing Director or Whole-Time Director double, i.e., 200% of the above mentioned managerial remuneration, if shareholders have given their approval through a special resolution.

Where a manager person who is not holding Rs. 5 lacs worth of shares or more or an employee or a director of the company not related to any director or promoter at any time during the two years prior to his appointment as a managerial person, the company can pay him up to a maximum of 2.5% of the “current relevant profits”, and up to 5% with the approval of shareholders by a special resolution.

For the purpose of this section, “current relevant profit” means profit calculated under Section 198, but without deducting the excess of expenditure over income as defined in Section 4(1) of Section 198 relating to all usual working charges in respect of those years during which that particular manager was not an employee, director or shareholder of the company or its holding or subsidiary companies.

However, Section IV Part II of Schedule V states that a managerial person shall be eligible for the following perquisites which shall not be included in the computation of the ceiling on remuneration specified in Section II and Section III:

(a) Contribution to provident fund, superannuation fund or annuity fund to the extent these either singly or put together are not taxable under the Income-tax Act, 1961 (43 of 1961);

(b) Gratuity payable at a rate not exceeding half a month’s salary for each completed year of service; and

(c) Encashment of leave at the end of the tenure.

Looking at clause (a) above, it is clear that any contribution made to provident fund, superannuation fund or annuity fund in excess of taxable limits under Income Tax Act, 1961 shall not be included for the purpose of calculation of managerial remuneration in the event of inadequate profits or nil profits. The law herein clearly prescribes what value of perquisites shall not be considered as part of remuneration in cases of inadequate profits. Further, had the intent of law been to include only taxable amount of perquisites in the definition of ‘remuneration’ under Section 2(78), then this clause would have been rendered meaningless. Thus, one can safely presume that where the intent was to specifically cover taxable value of perquisites law has been drafted clearly.

Minimum remuneration in case of losses during the tenure of managerial personnel

According to Departmental Clarification regarding amendments made by the Companies (Amendment) Act, 1988 as revised w.e.f. 1993, the Approval of Central Government shall not be required in case of loss or inadequacy of profit during the tenure of that managerial person were the appointment was made and minimum remuneration paid was strictly in accordance with Schedule XIII of the 1956 Act.

Devaluation and Managerial Remuneration

A non-resident Indian may occupy the position of a managerial person in certain companies. It has been examined by foreign exchange, taxation, Company Law and other aspects and was accordingly decided as a matter of policy that in case of devaluation of currency there was a need to compensate such non-resident managerial persons to maintain their remittance at the pre-devaluation level and such increase in remuneration is allowed even if the resultant increased remuneration exceeded the statutory limits imposed by the Companies Act.

Remuneration payable to a managerial person in two companies

Subject to the provisions of Sections I to IV, a managerial person shall draw remuneration from one or both companies, provided that the total remuneration drawn from the companies does not exceed the higher maximum limit admissible from any one of the companies of which he is a managerial person.
Penalty Clauses

If any person contravenes the provisions of the Section 197, he/she shall be punishable with fine, which shall not be less than one lakh rupees and may extend to five lakhs rupees. If a company or any officer of a company or any other person contravenes any of the provisions of this Act or the rules made thereunder, the company and every officer of the company who is in default, or any such other person shall be punishable with fine which may extend to ten thousand rupees, and where the contravention is a continuing one, with a further fine which may increase one thousand rupees every day after the first day during which the contravention continues.

CORPORATE SOCIAL RESPONSIBILITY (CSR) SPEND

The Companies Act, 2013 requires that every company with net worth of Rs.500 crore or more, or turnover of Rs 1,000 crore or more, or a net profit of Rs. 5 crore or more during any financial year will constitute a CSR committee.

The CSR Rules state that every company, which ceases to be a company covered under the above criteria for three consecutive financial years, will not be required to (a) constitute the CSR Committee, and (b) comply with other CSR related requirements, till the time it again meets the prescribed criteria.

Constitution of CSR Committee

The Companies Act, 2013 requires that a company which meets the CSR applicability criteria should constitute a CSR committee comprising three or more directors. The Companies Act, 2013 also states that out of these three directors, at least one director should be an independent director.

The CSR Rules state that a non-listed public company or a private company, which is not required to appoint an independent director as per the 2013 Act/ Directors’ Appointment Rules, can have its CSR Committee without an independent director. Also, a private company having only two directors on its board can constitute the CSR Committee with just two directors.

Some people argue that the CSR Rules are changing the requirements of the Companies Act, 2013. Hence, the issue arises whether a subordinate legislation can override the main legislation? However, most people are likely to welcome the clarifications provided in the CSR Rules.

CSR expenditure

In accordance with Section 135(5) of the Companies Act, 2013, the Board of each company covered under the CSR requirement needs to ensure that the company spends, in every financial year, at least 2% of its average net profits made during the three immediately preceding financial years in pursuance of CSR policy. Neither the Companies Act, 2013 nor the CSR Rules prescribe any specific penal provision if a company fails to spend the 2% amount. However, the Board, in its report, needs to specify the reasons for not spending the specified amount.

Neither the Companies Act 2013, nor the CSR Rules prescribe any specific penal provision if a company fails to spend the amount. Also, there does not appear to be any legal obligation on companies to make good of short spending of one year in the subsequent years. This indicates that there is no legal obligation on companies to incur CSR expenditure. However, due to the disclosure of short spend in the Board report, many reputed companies came into right who cannot afford to spend the prescribed amount. Hence, the naming and shaming policy created an implied pressure on companies to spend the requisite amount. Also, reputed companies, who have not been able to spend the requisite amount in one year, may try to meet the shortfall in subsequent years.
The Companies Act, 2013 read with the Accounts Rules requires several disclosures about performance, risks, etc. Key disclosures include:

- Extract of the annual return, which covers matters, such as indebtedness, shareholding pattern, details of promoters, directors and KMP and changes therein, details of Board meetings and attendance, remuneration of directors and KMPs and penalty or punishment imposed on the company, its directors/officers;
- Financial summary or highlights;
- Change in the nature of business, if any;
- Details of directors or KMP who were appointed or have resigned during the year;
- Names of companies which have become or ceased to be its subsidiaries, joint ventures or associate companies during the year;
- Details of significant and material orders passed by the regulators or courts or tribunals impacting the going concern status and company’s operations in future;
- Statement indicating development and implementation of risk management policy for the company including identification therein of elements of risk, if any, which, in the opinion of the Board, may threaten the existence of the company.

On the lines of prerevised Clause 49, RC49 requires that as part of the directors’ report or as an addition thereto, a MD&A report should form part of the Annual Report to the shareholders. This MD&A should include discussion on the following matters within the limits set by the company’s competitive position:

- Industry structure and developments
- Opportunities and threats
- Segmentwise or productwise performance
- Outlook
- Risks and concerns
- Internal control systems and their adequacy
- Discussion on financial performance with respect to operational performance
- Material developments in Human Resources/Industrial Relations front, including number of people employed

**RELATED PARTY DISCLOSURES – IAS 24**

IAS 24 Related Party Disclosures requires disclosures about transactions and outstanding balances with an entity’s related parties. The standard defines various classes of entities and people as related parties and sets out the disclosures required in respect of those parties, including the compensation of key management personnel.

IAS 24 was reissued in November 2009 and applied to annual periods beginning on or after 1 January 2011.
Objective of IAS 24

The objective of IAS 24 is to ensure that an entity’s financial statements contain the disclosures necessary to draw attention to the possibility that its financial position and profit or loss may have been affected by the existence of related parties, and by transactions and outstanding balances with such parties.

Who are Related Parties?

A related party is a person or entity related to the entity that is preparing its financial statements.

a) A person or a close member of that person’s family is related to a reporting entity if that person:
   - Has control or joint control over the reporting entity
   - Has significant influence over the reporting entity
   - Is a member of the key management personnel of the reporting entity or of a parent of the reporting entity.

b) An entity is related to a reporting entity if any of the following conditions applies:
   - The entity and the reporting entity are members of the same group.
   - One entity is an associate or joint venture of the other entity.
   - Both entities are joint ventures of the same party.
   - One entity is a joint venture of a third and the other entity is an associate of the third entity.
   - The entity is a post-employment defined benefit plan for the benefit of employees of either the reporting entity, or an entity related to the reporting entity.
   - The entity is controlled or jointly controlled by a person identified in (a).
   - The entity, or any member of a group of which it is a part, provides key management personnel services to the reporting entity or to the parent of the reporting entity. Related Party Disclosures requires disclosures about transactions and outstanding balances with an entity’s related parties.

The standard defines various classes of entities and people as related parties and sets out the disclosures required in respect of those parties, including the compensation of key management personnel.

IAS 24 was reissued in November 2009, and applied to annual periods beginning on or after 1 January 2011.

Segment Reporting (Accounting Standard 17)

Segment reporting is the reporting of the operating segments of a company in the disclosures accompanying its financial statements. Segment reporting is required for publicly held entities, and is not required for privately held ones. Segment reporting is intended to give information to investors and creditors regarding the financial results and position of the most important operating units of a company, which they can use as the basis for decisions related to the company.

Under Generally Accepted Accounting Principles (GAAP), an operating segment engages in business activities from which it may earn revenue and incur expenses, has discrete financial information available, and whose results are regularly reviewed by the entity’s chief operating decision maker for performance assessment and resource allocation decisions. Follow these rules to determine which segments need to be reported:
Aggregate the results of two or more segments if they have similar products, services, processes, 
customers, distribution methods, and regulatory environments.

Report a segment if it has at least 10% of the revenues, 10% of the profit or loss, or 10% of the 
combined assets of the entity.

If the total revenue of the segments you have selected under the preceding criteria comprise less than 
75% of the entity's total revenue, then add more segments until you reach that threshold.

You can add more segments beyond the minimum just noted, but consider a reduction if the total 
exceeds ten segments.

The information you should include in segment reporting includes:

- The factors used to identify reportable segments;
- The types of products and services sold by each segment;
- The basis of organization (such as being organized around a geographic region, product line, and so 
  forth);
- Revenues;
- Interest expense;
- Depreciation & amortization;
- Material expense item;
- Equity method interests in other entities;
- Income tax expense or income;
- Other material non-cash items;
- Profit or loss.

Case 1. A Ltd. had a reportable segment in year 02-03, but for 03-04, that reportable segment does not meet 
the 10% threshold limit. Should A Ltd. continue or drop the segment for reporting in 03-04?

Solution: A segment may have been a reportable segment in the prior period, but does not have reportable segment 
in the current period, as it no longer meets the 10% threshold limit of revenue, result or assets or other reportable 
segments that may account for more than 75% of the entity's revenue. The AS requires A Ltd. to continue the 
reportable segment of 02-03 also for 03-04, even though its revenue, result and assets no longer meet the 10% 
threshold limit. Taking a clue about the applicability of Accounting Standards, A Ltd. would be required to disclose 
for two consecutive years, and thereafter cease reporting that segment which does not meet the threshold criteria.

Conversely, if a segment is identified by A Ltd. in 03-04 as a reportable segment, Accounting Standard requires 
that prior period segment data, i.e., 02-03 also be presented unless it is impracticable to do so, even if the 10% 
threshold had not been satisfied in the preceding year.

Case 2: A Ltd. is in one business segment, i.e., deals in food business. Also it sells entire production in India. 
Is A Ltd. required to give information as required under AS 17?

Solution: If A Ltd. has neither more than one business segment nor more than one geographical segment, 
segment information as per AS 17 is not required to be disclosed. However A Ltd. should do well to disclose, 
since it has one business segment, segment information as per AS 17 is not required to be disclosed. However, 
should company A Ltd. have turnover spread over geographical segments, such as India, USA, UK and Asia
other than India and the threshold criteria of 10% or more is met in each of above geographical segment, then
A Ltd. will be required to give segment revenue by geographical area even though primary business segment
may not be applicable.

**Case 3:** When consolidated financial statements is prepared, wherein both single financial statements and
consolidated financial statements of the parent company is given, should segment reporting also be given by
the parent company in its single financial statements?

**Solution:** AS mentions, if a single financial report contains both consolidated financial statements and the
separate financial statements of the parent, segment information need be presented only on the basis of the
consolidated financial statements.

However, since consolidated financial statement is still not a recognized concept under the Companies Act,
1956, and that stand alone Annual report is required to be filed with Registrar of Company, enterprises would
be advised to prepare segment reporting in its stand alone financial statements also.

### AUDIT QUERY

An accounting audit is the process of examining a company’s entire financial situation, with an emphasis on
ensuring compliance with relevant reporting standards, and promoting adequate cash-handling policies and
internal controls. In most countries, regular audits by outside firms are required for publicly traded corporations.
In contrast, small businesses are typically not subject to as rigorous a set of reporting standards and controls.
Therefore, are often not subject to mandatory audits. Learning how to perform a basic internal accounting audit
on your own small business can provide you with a comprehensive understanding of your company’s financial
strengths and weaknesses.

Audit queries are questions asked by an auditor during an investigation. These may be used to gather information
to come to a conclusion in the audit.

The following parameters are looked during audit queries:

1. Any questions related to a company which is being audited either by an internal or external auditor.
2. The final touch of the accounts.
3. It is the matter being investigated while examining financial report of a company.
4. Audit queries are questions asked by an auditor during an investigation. These may be used to gather
information to come to a conclusion in the audit.
5. An audit query is a explanation that is required by the audit team on certain points that they may have
identified during an audit.
6. When you get asked to justify an action by the auditors - e.g., invoice accrual prepayment, etc.
7. It is an inquiry from an auditor also known as findings.
8. Audit query’s are questions asked by the auditor during an investigation. The response can be used to
help the auditor come to a conclusion regarding an audit.
9. I assume an audit query is when a particular set of data is pulled to audit.

### HOW TO READ AND INTERPRET FINANCIAL STATEMENTS

Interpreting the financial health of a corporation requires an understanding of its financial statements. The
three main ones are balance sheets, income statements and cash flow statements. All are normally put out
on an annual and quarterly basis. Comprehending every detail of these statements is difficult without years of education, but knowing their functions and recognizing certain nuggets of information provides a picture of where a corporation stands. These statements are also easy to attain, as all are filed with the Ministry of Corporate Affairs (MCA).

**Types of Statements**

1. **Examine a Balance Sheet.** It shows what a corporation owns and what it owes by solving the following equation: Assets = Liabilities + Shareholders’ Equity. This means anything a corporation has of value will be offset by what it owes.

   Examples of assets are physical property, trademarks, inventory and quantifiable items a corporation expects to receive. Liabilities represent what a corporation owes, such as rent, loans, payroll, cost of materials, taxes and any lawsuits. Shareholders’ equity is the value of the company after selling all its assets and paying off liabilities, also known as the corporation’s net worth. Generally, a healthier company has more assets than liabilities, though it is always wise to compare corporations from the same industries to get a bearing on what exactly its health is.

2. **Read an Income Statement.** This is a snapshot of a corporation’s revenue for a certain period of time. These statements are normally produced both annually and on a quarterly basis. These are organized in a tiered fashion in which the gross amount of revenue is listed on top. Expenses associated with earning the revenue are listed beneath that, with the final entries being the “bottom line,” or the net amount earned after the costs of generating the revenue. Among the most-watched figures in an income statement is the Earnings Per Share (EPS). This represents the amount of money passed on to shareholders if the corporation distributed its earnings for that period. Many analysts predict EPS prior to the release of company’s financial statements, and its comparison to the actual figure is an indicative barometer of performance. A company’s stock prices often climb and slide based simply on whether it meets EPS expectations.

3. **Read a Cash Flow Statement.** In this statement, information from the balance sheet and income statement are taken to paint a picture of how a corporation spent its money over a set period. The statement details areas of cash flow, takes into account the value of securities, and details financing activity, such as the amount of money spent in a period to cover loans. Consider cash flow statements as truth statements. They show exactly how money flows from a corporation for a particular amount of time, whereas the other two statements contain conjectures and assumptions. For instance, an item known as goodwill on an income statement is very subjective. Goodwill represents the money that is paid for a corporation above and beyond the cost of assets.

4. **Read the footnotes.** The SEC requires corporations to list information about their accounting practices, taxes, pension and retirement plans and stock options normally in the last section of a financial statement. Corporations also detail further information in the “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” which is also required by the SEC. This is a chance for the managers to give their interpretation of the financial results, detail trends and risks, and speak about the future of the corporation. These can be found in the first part of both quarterly and annually produced financial results.
LESSON ROUND UP

- Financial Statements represent a formal record of the financial activities of an entity.
- Financial statements are reports prepared and issued by company management to give investors and creditors additional information about their company’s performance and financial standings.
- The four general purpose financial statements include: Income Statement, Balance Sheet, Statement of Stockholders Equity, Statement of Cash Flow.
- Financial statements are prepared by transferring the account balances on the adjusted trial balance to a set of financial statement templates.
- Both public and private companies issue at least 4 financial statements to attract new investors and raise funding for expansions.
- Financial sheets that are issued for time periods smaller than one year are called interim statements.
- The annual financial statement form is prepared once a year and cover a 12-month period of financial performance.
- Information to be presented in the profit or loss section or the statement of profit or loss.
- Information to be presented in other comprehensive income section.
- Information to be presented either in the statement of profit or loss and other comprehensive income or in the notes.
- Information to be presented either in the statement of changes in equity or in the notes.
- IAS 7 Cash flow statement sets out requirements for the presentation of the cash flow statement and related disclosures.
- The listed entity shall submit a compliance certificate to the exchange duly signed by both that is by the compliance officer of the listed entity and the authorized representative of the share transfer agent, wherever applicable, within one month of the end of each half of the financial year.
- Depreciation may be defined as the gradual reduction in the value of an asset due to wear and tear as in the case of physical assets like building, machinery, etc., or by mere passing of time as in the case of lease, patent and copyright.
- If depreciation is not provided, the value of assets shown in Balance Sheet will not present the true and fair value of assets.
- Two methods to calculate depreciation: straight line method and written down value method.
- Provisions is to be made in respect of a liability which is certain to be incurred, but its accurate amount is not known.
- Reserves are the amount set aside out of profits. It is an appropriation of profits and not a charge on the profits.
- The managerial remuneration shall be payable to a person appointed within the meaning of section 196 of the Companies Act, 2013.
- In accordance with Section 135(5) of the 2013 Act, the Board of each company covered under the CSR requirement needs to ensure that the company spends, in every financial year, at least 2% of its average net profits made during the three immediately preceding financial years in pursuance of CSR policy.
- The 2013 Act read with the Accounts Rules require several disclosures about performance, risks, etc.
- IAS 24 Related Party Disclosures requires disclosures about transactions and outstanding balances with an entity’s related parties.
- Segment reporting is the reporting of the operating segments of a company in the disclosures.
accompanying its financial statements.

- Audit queries are questions asked by an auditor during an investigation. These may be used to gather information to come to a conclusion in the audit.
- Interpreting the financial health of a corporation requires an understanding of its financial statements.

**SELF TEST QUESTIONS**

1. Analysis and interpretation of financial statement refer to the treatment of the information contained in the income statement and balance sheet so as to afford full diagnosis of profitability and financial soundness of the business. Discuss.

2. How do the financial statement are read and interpreted. Discuss in detail.

3. XYZ Ltd. had a reportable segment in year 10-11, but for 11-12, that reportable segment does not meet the 10% threshold limit. Should XYZ Ltd. continue or drop the segment for reporting in 11-12?

4. Let us assume that a company has incurred lower amount on CSR activities in year one. It expects to cover up the short-spent amount in the subsequent years. Is the company required to create a provision toward such short-spent amount?

5. What do you mean by managerial remuneration? How much maximum remuneration is payable by a company to its managerial personnel?

6. Discuss in detail the Quarterly, Halfyearly and Annual Financial Statement pursuant to SEBI Listing Regulations 2015.

7. What do you mean by Depreciation. Discuss with examples the methods of calculating depreciation.

8. Write short notes on:
   a) Audit Query
   b) Related Party
   c) Segment Reporting
   d) CSR
Lesson 7
Consolidation of Accounts as per Companies Act, 2013

LESSON OUTLINE

- Introduction
- Meaning of Holding and Subsidiary Company
- Holding Vs Subsidiary Company
- Types of Subsidiaries
- Legal Requirements for a Holding Company
- Consolidated Financial Statements
- Minority Interest
- Consolidated Profit & Loss
- Cost of Control (Or) Goodwill
- Pre-Acquisition Profits/Reserves
- Revaluation of Assets
- Bonus Shares Issued By Subsidiary Company
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

Modern day corporate structure are increasingly becoming more and more complex. A company lets say the parent company or holding company may not carry the bonus under its own banner but through a number of other companies, normally known as subsidiary companies, associates and joint venture or group companies. This chapter will deals with the preparation of consolidated financial statement of Holding and subsidiary companies. How the post consolidation accounting books look like will presented in this chapter. This chapter will also helps in calculating minority interest, Goodwill and revaluation of assets.

After studying this chapter you should be able to:

- Define Holding Company and Subsidiary Company
- Understand the legal requirements relating to presentation of accounts by a Holding Company.
- Understand the requirement of schedule III.
- Explain Consolidated Financial Statements.
- Prepare Consolidated balance sheet of a holding company and its subsidiaries
- Appreciate the various steps involved in preparation of Consolidation Balance Sheet & Consolidated Profit & Loss Account.
- Explain certain key terms associated with this chapter.
INTRODUCTION

HOLDING COMPANY
As per Section 2(46) of the Companies Act, 2013 “holding company”, in relation to one or more other companies, means a company of which such companies are subsidiary companies;

SUBSIDIARY COMPANY
As per Section 2(87) of the Companies Act, 2013 “subsidiary company” or “subsidiary”, in relation to any other company (that is to say the holding company), means a company in which the holding company—

(i) controls the composition of the Board of Directors; or

(ii) exercises or controls more than one-half of the total share capital either at its own or together with one or more of its subsidiary companies.

Provided that such class or classes of holding companies as may be prescribed shall not have layers of subsidiaries beyond such numbers as may be prescribed.

Explanation – For the purposes of this clause—

(a) a company shall be deemed to be a subsidiary company of the holding company even if the control referred to in sub-clause (i) or sub-clause (ii) is of another subsidiary company of the holding company;

(b) the composition of a company's Board of Directors shall be deemed to be controlled by another company if that other company by exercise of some power exercisable by it at its discretion can appoint or remove all or a majority of the directors;

(c) the expression “company” includes anybody corporate;

(d) “layer” in relation to a holding company means its subsidiary or subsidiaries;

COMPANY INCLUDES BODY CORPORATE

- As per Sec 2(87) of the Companies Act, 2013 Company include a ‘Body Corporate’.
- As per Sec 2(11) of the Companies Act, 2013 Body Corporate includes a ‘Company incorporate out of India’.

Thus, an Indian company in which more than 50% shares are held by a foreign body corporate will be a ‘Subsidiary Company’.

Similarly, any Indian body corporate can be ‘holding company’ even if that body corporate is not registered as ‘company’ under company Act.

An Indian company can be holding/subsidiary of a foreign body corporate even if it is not registered as a Company.

SOME DECISIONS OF CASES

- A holding company is not liable for provident dues of a Subsidiary Company.
- Workmen of subsidiary Company are not workmen of Holding Company.
- It was held that holding company is not liable for wages of its Subsidiary Company which was under winding up.
- A Holding Company can’t be penalized for violation of foreign exchange provisions of Subsidiary Company.
Lesson 7  Consolidation of Accounts as per Companies Act, 2013  225

- Holding and Subsidiary Companies are independent legal entities, and are to be treated as such. These can’t be treated as one single unit for all purposes.
- Holding and Subsidiary are separate and distinct legal entities.

**SHARE- HOLDING OF HOLDING COMPANY BY SUBSIDIARY COMPANY**

A Holding Company can and does hold shares of subsidiary, but a subsidiary can’t hold shares in its holding company. Share allotment made to subsidiary is void.

This restriction applies even if shares are held by nominee of subsidiary Company and not by the subsidiary company itself.

However, there are certain cases, subsidiary can be member of its holding Company:

a) When subsidiary is a legal representative of deceased member of holding Company.
b) When subsidiary is concerned in shares as trustee.
c) Investment held before the Company became subsidiary can continue, but in that case, subsidiary has no voting right in holding Company.

**Associate Company**

Associate Company, in relation to another company, means a company in which that other company has a significant influence, but which is not a subsidiary company of the company having such influence and includes a joint venture company. The purport of significant influence has been clarified in the explanation as control of at least twenty per cent of total share capital, or of business decisions under an agreement. In the case of joint ventures, it is always by way of an agreement, significant influence is used but not necessarily by control over share capital. The meaning of significant influence is in line with AS18.

**Wholly Owned Subsidiary Company**

A company in which all the shares with voting rights (i.e. 100%) are owned by the holding company, it is said to be a wholly owned subsidiary company.

**Partly Owned Subsidiary Company**

A company in which only the majority of shares (more than 50%) are owned by the holding company, it is said to be a party owned subsidiary.

**Minority Shareholder**

Small Shareholder: A shareholder who is holding shares of nominal value of INR 20,000 or such other sum as may be prescribed.

Minority Shareholder: Equity holder of a firm who does not have the voting control of the firm, by virtue of his or her below fifty percent ownership of the firm’s equity capital

**LEGAL REQUIREMENTS FOR A HOLDING COMPANY**

Section 129 of the Companies Act, 2013 stipulates that the balance sheet of a holding company has to be accompanied by the below-mentioned documents of relating to each of its subsidiaries:

1. A copy of the Balance Sheet of the subsidiary
2. A copy of the P&LA/c of the subsidiary company
3. A copy of the report of its Board Of Directors
4. A copy of the report of its auditors

5. A statement containing the following particulars:
   (i) The nature and extent of holding companies interest in the subsidiary at the end of the last financial year
   (ii) The net aggregate amount of profits or losses in the subsidiary so far as it concerns the members of the holding company and is not dealt within the holding company's accounts.

6. If the financial year of the holding company and its subsidiary company coincide with each other subsidiary company’s balance sheet and other documents specified above with respect to the same financial year should be attached to the balance sheet of the holding company.

If the financial year of the subsidiary company does not coincide with the financial year of the holding company, a statement showing the following should be attached:
   (i) Whether, and to what extent, there has been a change in the holding company’s interest in the subsidiary company since the close of the financial year of the subsidiary company
   (ii) Details of any materials changes which have occurred between the end of the financial year of the subsidiary company and the end of the financial year of the holding company in respect of:
       (a) The subsidiary’s fixed assets
       (b) Its investments
       (c) The moneys lent by it
       (d) The moneys borrowed by it for any purpose other than that of meeting its current liabilities
       (e) If for any reason, the board of directors of the holding company is unable to obtain information on profits (capital or revenue) a report in writing to the effect.

In a nutshell, if the financial years of both the subsidiary and holding companies do not coincide, the preceding year’s balance sheet and other statements of the subsidiary company should be attached. The information attached to the balance sheet of a holding company in respect of its subsidiary companies could not be more than 6 months.

**CONSOLIDATED FINANCIAL STATEMENTS**

Consolidated financial statements means the preparation and presentation of profit and loss account and balance sheet of a holding company and its subsidiaries in a single format. According to the companies and, there is not legal provision insisting a holding company to prepare and present ‘Group Accounts’ consolidated financial statements. Even though there is no statutory provision for a holding company to prepare consolidated financial statements, the ICAI has issued AS-21 on ‘consolidated financial statements’. It is not mandatory. As per AS-21, holding company means a parent company which has one there subsidiaries. A ‘group’ is a ‘parent’ and all its subsidiaries. The main purpose of the preparation of consolidated statements is to reflect a true and fair view of the position and the profit or loss of the holding company ‘group’. Further, by preparation of consolidated financial statements, the shareholders are in a position to get firsthand information on the company authentically.

The advantages of consolidation of financial statements are as follows:

1. **Facilitates easy comprehension** : Shareholders are in a position to get a clear insight about the financial position of the group (parent and all its subsidiaries)

2. **Assists in ascertaining intrinsic value of share** : For various accounting procedures, intrinsic value of shares serve as an essential tool. This can be attained on the basis of consolidated financial statements of companies.
3. **Proper assessment of return on investment**: Only consolidated financial statements can provide proper information on the total share of holding company in the revenue profit of its subsidiaries.

4. **Minority interest disclosure**: In the consolidated balance sheets, the item shown under the head ‘Minority Interest’ discloses the total amount payable to outside shareholders. This is liability payable to outsiders, i.e., general public. This factor is the main factor to be considered in the process of acquisition of company.

5. **Helps in the “evaluation” of holding company**: As consolidated financial statements reflect a true and fair view of the position of the holding company (parent) as a group, the investors may be able to evaluate the performance of the company. Thereby, it enhances the overall performance of the group.

The following are its limitations:

1. Varied information: All the subsidiary companies may not carry the same type of business. As their activities differ from each other, information combined together in a single format may result in confusion and alternatives.

2. Irrelevant concealment of facts: The data got from subsidiary companies may not be relevant in the combined form. Further, to arrive at common figures, some of the facts may be suppressed. In such a situation, a consolidated financial statement may not reflect a true and fair view of the position of the companies.

### Contents and Format of Consolidated Balance Sheet

Section 129 (Clause 3) of the Companies Act, 2013 mandated the companies having one or more subsidiaries, to prepare Consolidated Financial Statements. According to this section, where a company has one or more subsidiaries, it shall, in addition to separate financial statements will prepare a consolidated financial statement of the company and of all the subsidiaries in the same form and manner as that of its own.

It shall also attach along with its financial statements, a separate statement containing the salient features of the financial statement of its subsidiary or subsidiaries in the prescribed form.

Consolidated Financial Statements are intended to show the financial position of the group as a whole - by showing the economic resources controlled by them, by presenting the obligations of the group and the results the group achieves with its resources.

The Schedule III of the Companies Act, 2013, provides certain general instructions for the preparation of consolidated financial statements.

1. Accordingly, where a company is required to prepare Consolidated Financial Statements, i.e., consolidated balance sheet and consolidated statement of profit and loss, the company shall mutatis mutandis follow the requirements of Schedule III of the Companies Act, 2013, as applicable to a company in the preparation of balance sheet and statement of profit and loss. In addition, the consolidated financial statements shall disclose the information as per the requirements specified in the applicable Accounting Standards including the following:

   (i) Profit or loss attributable to “minority interest” and to owners of the parent in the statement of profit and loss shall be presented as allocation for the period.

   (ii) “Minority interests” in the balance sheet within equity shall be presented separately from the equity of the owners of the parent.
### Consolidated Balance Sheet

**Of**

**Holding Company and its Subsidiaries**

**as on .......**

<table>
<thead>
<tr>
<th>EQUITY AND LIABILITIES</th>
<th>Amount</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHAREHOLDER’S FUND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Share Capital (Holding Company)</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>b) Reserves &amp; Surplus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) General Reserve (Holding Co.)</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>ii) Capital Reserve (Holding Co.)</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>Add: Capital Reserve from Acquisition</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>iii) Surplus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surplus of Holding Co.</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>Add: Share in revenue profits of Subsidiary Co.</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>Less: Unrealized Profits</td>
<td>(XX)</td>
<td>XX</td>
</tr>
<tr>
<td><strong>2. Non-current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Minority Interest</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>b) Holding Co.</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>Subsidiary Co.</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td><strong>3. Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holding Co.</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>Subsidiary Co.</td>
<td>XX</td>
<td></td>
</tr>
<tr>
<td>Less: Inter Co. or mutual Owings</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>XX</td>
<td></td>
</tr>
</tbody>
</table>

**ASSETS**

1. **Non-current assets**

a) Fixed Assets:

i) **Tangible assets**

| Holding Co. | XX    |        |
| Subsidiary Co. | XX    | XX    |

ii) **Intangible assets:**

a) Goodwill or Cost of Control:

| Holding Co. | XX    |        |
| Subsidiary Co. | XX    | XX    |

b) Goodwill resulting from acquisition | XX    | XX    |

b) **Non Current Investment**
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<table>
<thead>
<tr>
<th>Holding Co. (except investment in shares of subsidiary Co.)</th>
<th>XX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Current assets</strong></td>
<td></td>
</tr>
<tr>
<td>Holding Co.</td>
<td>XX</td>
</tr>
<tr>
<td>Subsidiary Co.</td>
<td>XX</td>
</tr>
<tr>
<td>Less: Inter Company or Mutual Owings</td>
<td>XX</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>XX</td>
</tr>
</tbody>
</table>

**Illustration 1.**

Model: Cancellation of investment – Wholly owned subsidiary company

From the following Balance Sheet of H Ltd. (holding) and S Ltd. (subsidiary), prepare a consolidated balance sheet of H Ltd. and its subsidiary S Ltd.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>H Ltd Rs.</th>
<th>S Ltd Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity &amp; Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares of Rs. 10 each</td>
<td>5,00,000</td>
<td>2,00,000</td>
</tr>
<tr>
<td>Sundry Liabilities</td>
<td>1,00,000</td>
<td>25,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,00,000</td>
<td>2,25,000</td>
</tr>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry Assets</td>
<td>400000</td>
<td>225000</td>
</tr>
<tr>
<td>Investment :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20,000 shares of Rs.10 each of S Ltd</td>
<td>200000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,00,000</td>
<td>2,25,000</td>
</tr>
</tbody>
</table>

**Solution:**

**Notes**

1. The Balance Sheet reveals that H Ltd. owns the whole of issued share capital of S Ltd. (wholly owned subsidiary)

2. The balance sheet of H Ltd. reveals the investment in shares of S Ltd. the amount is equal to the nominal value of issued share capital of S. Ltd.

3. These two amounts represent the same transaction but different in nature. (the issued capital of S Ltd. and investment held by H Ltd.)

4. These two are the internal items of H Ltd. and S Ltd.

5. Hence, these should be eliminated in the preparation of consolidated balance sheet shown in the following:
Consolidated Balance Sheet of  
H Ltd. & S Ltd. as on .....

**I. EQUITIES AND LIABILITIES**

<table>
<thead>
<tr>
<th></th>
<th>H Ltd. Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
</tr>
<tr>
<td>Share Capital</td>
<td></td>
</tr>
<tr>
<td>50,000 shares of Rs. 10 each (H Ltd. Only)</td>
<td>5,00,000</td>
</tr>
<tr>
<td>2. Sundry Liabilities</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td></td>
</tr>
<tr>
<td>S Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,25,000</td>
</tr>
</tbody>
</table>

**II. ASSETS**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sundry Assets</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td></td>
</tr>
<tr>
<td>S Ltd.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,25,000</td>
</tr>
</tbody>
</table>

**Note:** The investment account on the assets side of H Ltd. is replaced by the total assets of S Ltd. on the assets side of consolidated balance sheet and its liabilities are shown on the liabilities side.

### Minority Interest

Minority interest is that part of the net results of operations and of net assets of a subsidiary attributable to interests which are not owned, directly or indirectly through subsidiaries, by the holding (parent) company. In short, minority interest represents the claims of the outside shareholders of a subsidiary. Minority interests in the net income of consolidated subsidiaries for the reporting period are identified and adjusted against the income of the group in order to arrive at the net income attributable to the shareholders of the holding company.

### Objectives:

1. The objective of the policy is to protect the rights of the minority shareholders and keep them updated about their rights from time to time.
2. To check that the Shareholder Relationship Committee is redressing the grievance of the minority shareholders.

As per para 13(e) of AS 21, minority interests in the net assets of consolidated subsidiaries should be identified and presented in the consolidated balance sheet separately from liabilities and the equity of the parent’s shareholders. Minority interests in the net assets consist of:

(i) the amount of equity attributable to minorities at the date on which investment in a subsidiary is made; and
(ii) the minorities share of movements in equity since the date the parent subsidiary relationship came in existence.

Minority interest may be computed as follows:

\[
\text{Minority Interest} = \text{Share Capital of subsidiary related to outsiders} + \text{Minority interest in reserves and profits of subsidiary company}
\]
Illustration 2

Model: Minority interest

From the following, prepare consolidated balance sheet of H Ltd. and its subsidiary S Ltd.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities &amp; Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>5,00,000</td>
<td>3,00,000</td>
</tr>
<tr>
<td>Shares of Rs.10 each</td>
<td>1,40,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>640000</td>
<td>320000</td>
</tr>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry Assets</td>
<td>400000</td>
<td>320000</td>
</tr>
<tr>
<td>Investment in S Ltd.</td>
<td>240000</td>
<td></td>
</tr>
<tr>
<td>24000 shares of Rs.10 each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,40,000</td>
<td>3,20,000</td>
</tr>
</tbody>
</table>

Notes:

1. This partly owned subsidiary company H Ltd. owns to the extent:
   - Issued capital of S Ltd. Rs.3,00,000
   - Owned as investment in shares of S Ltd. Rs.2,40,000
     \[ \frac{Rs.2,40,000}{Rs.3,00,000} \times 100 = 80\% \]
   \[ \therefore \text{proportionate share} \]

2. Outside shareholders share = (100-80)% = 20%
   \[ \therefore \text{value of minority interest} = 20\% \text{ of Rs.3,00,000} \]
   \[ = \text{Rs.60,000} \]

   This amount may be shown in either of the following two ways:
   (i) As a separate item under the head ‘Minority Interest’
   (ii) Along with share capital of holding company

3. As in this problem, no items relating to capital reserve profit and loss; revenue reserve profit and loss or P&L A/c balance is given – Minority interest is computed straight away in Notes 1 and 2.
Consolidated Balance Sheet of
H Ltd. & S Ltd.
as on ...... 

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount (Rs.)</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. EQUITIES AND LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Share Capital -50,000 shares of Rs. 10 each (H Ltd. only)</td>
<td>5,00,000</td>
<td></td>
</tr>
<tr>
<td>2. Non-current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minority Interest</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>3. Other Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>1,40,000</td>
<td>1,60,000</td>
</tr>
<tr>
<td>S Ltd.</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,20,000</td>
<td></td>
</tr>
<tr>
<td><strong>II. ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sundry Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>4,00,000</td>
<td>7,20,000</td>
</tr>
<tr>
<td>S Ltd.</td>
<td>3,20,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,20,000</td>
<td></td>
</tr>
</tbody>
</table>

Consolidated Profit & Loss Account

While preparing the Consolidated Profit and Loss Account of the holding company and its subsidiary, the items appearing in the Profit and Loss Account of the holding and subsidiary companies have to be aggregated. But in doing so, the following adjustments have to be made:

(i) Transfer of goods between the holding company and the subsidiary company should be eliminated both from the purchases and sales appearing in the Consolidated Profit and Loss Account.

(ii) Stock Reserve for unrealised profit in respect of inter-company transactions should be created by debiting Consolidated Profit and Loss Account and crediting Stock Reserve Account.

(iii) The share of profits of the subsidiary company arising before the date of acquisition of shares by the holding company that belongs to the holding company will be debited to the Consolidated Profit and Loss Account and credited to Capital Reserve or Goodwill Account as the case may be. In case of loss the entry will be just reversed.

(iv) The share of profits or losses belonging to the minority shareholders will be respectively credited or debited to Minority Interest Account.

(v) Dividends received from the subsidiary company by the holding company should be eliminated from both the sides of the Consolidated Profit and Loss Account.

(vi) Care should be taken to see that both the companies pass entries for interest accrued and outstanding on debentures of the subsidiary company held by the holding company. The debenture interest should
be eliminated from both the sides of the Consolidated Profit and Loss Account to the extent to which it relates to the debentures held by the holding company.

(vii) If the subsidiary company has passed entries for proposed dividend and the holding company has taken credit for its shares of the dividends, the holding company’s share should be eliminated from both the sides of the Consolidated Profit and Loss Statement. The necessary changes should also be made on both the sides of the Consolidated Balance Sheet. However, if the holding company has not passed entries for proposed dividends of the subsidiary company, the debit in respect of the proposed dividend should be reduced by the holding company’s share in such proposed dividend and obviously, the liability in respect of proposed dividend in the Consolidated Balance Sheet should also be reduced.

(viii) If there are profits and the dividends on cumulative preference shares are in arrears, the arrears of dividends on preference shares held by the Minority shareholders should be debited to the Consolidated Profit and Loss Account and credited to Minority Interest Account.

(ix) If fixed assets of the subsidiary company are revalued at the time of acquisition of shares by the holding company without any alteration in book-values, the excess or short depreciation should be adjusted by debiting or crediting the Consolidated Profit and Loss Account and crediting or debiting the respective Asset Account.

(x) The minority interest will consist of its proportion of total profits after adjustment of excess or short depreciation due to over or under valuation of fixed assets, but before adjusting the proportionate unrealised profit on stock.

It is important to note here that the consolidated Profit and Loss Statement has got no concern with the Consolidated Balance Sheet. It is prepared in addition to the Consolidated Balance Sheet to serve the purpose of showing the total profits earned by the group of companies for a particular period

(1) PROFIT AND LOSS ACCOUNT

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note No.</th>
<th>Figures for the Current Reporting period</th>
<th>Figures for the Previous Reporting period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Revenue from operations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II Other Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III Total Revenue (I + II)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV Expenses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of materials consumed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases of Stock-in-Trade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in inventories of finished goods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee benefits expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total expense</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V Profit before exceptional and extraordinary items and tax (III-IV)
VI Exceptional items
VII Profit before extraordinary items and tax (V-VI)
VIII Extraordinary items
IX Profit before tax (VII-VIII)
X Tax expense:
   Current tax
   Deferred tax
XI Profit (Loss) for the period from continuing operations
XII Profit / (Loss) from discontinuing operations (before tax)
XIII Tax expense of discontinuing operations
XIV Profit/(Loss) from discontinuing operations (after tax) (XII-XIII)
XV Earning per equity share:
   1) Basic
   2) Diluted

2. In Consolidated Financial Statements, the following shall be disclosed by way of additional information:

<table>
<thead>
<tr>
<th>Name of the entity in the</th>
<th>Net Assets, i.e., total assets minus total liabilities</th>
<th>Share in profit or loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As % of consolidated net assets</td>
<td>Amt</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Parent Subsidiaries Indian
1.
2.
3.
Foreign
1.
2.
3.
Minority Interests in all subsidiaries
Associates
### Consolidation of Accounts as per Companies Act, 2013

**Entry 1:** Consolidation of accounts as per Companies Act, 2013

**Entry 2:** Investment as per the equity method

<table>
<thead>
<tr>
<th><strong>Indian</strong></th>
<th><strong>Foreign</strong></th>
<th><strong>Joint Ventures (as per proportionate consolidation/investment as per the equity method)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
<td>3.</td>
</tr>
</tbody>
</table>

**Entry 3:** Total

<table>
<thead>
<tr>
<th><strong>Indian</strong></th>
<th><strong>Foreign</strong></th>
<th><strong>Joint Ventures (as per proportionate consolidation/investment as per the equity method)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. All subsidiaries, associates and joint ventures (whether Indian or foreign) will be covered under consolidated financial statements.

4. An entity shall also disclose the list of subsidiaries or associates or joint ventures which have not been consolidated in the consolidated financial statements along with the reasons of not consolidating.

### Cost of Control (or) Goodwill

A general, the shares of a subsidiary company are purchased either as a premium or at a discount by a holding company. When the share capital of the subsidiary company held by the holding company is cancelled against investment in share (cost), difference will arise.

1. When the holding company purchases the shares at a price above the nominal value, the excess price paid represents cost of control or goodwill.

   It may be said that “cost of control” is the “excess” paid by the holding company to acquire “Controlling Interest” in the subsidiary company.

   This may be presented in the form of equation as:

   \[
   \text{Cost of control or goodwill} = \text{Investment (at cost)} - \text{Face or paid-up value of shares purchased}
   \]

2. When the holding company purchases shares at a price below the face value, the difference represents ‘capital reserve’. This may be presented in the form of equation as:
Capital reserve = Face or paid-up value of shares purchased – Investment at cost

Method of ascertaining cost of control (or) reserve:

**Step 1:** Amount paid for shares purchased  
(by the holding company in a subsidiary)

**Add:**

**Step 2:** Holding Company’s Share of Capital Loss

Rs. XX

**Less:**

**Step 3:**

(i) Face Value of Shares

(ii) Holding company’s share of capital loss

(iii) Holding company’s share of bonus shares issued by subsidiary

(iv) Holding company’s share of dividend paid out of capital profit

Rs. XX

**Step 4:** Goodwill (or) capital reserve:

XX

Notes:

1. In step 4, if the balance is positive it is goodwill. On the other hand, if the balance is negative it is capital reserve.

2. This amount will be merged with goodwill in the reserve balance sheets of holding and subsidiary companies.

**Illustration 3.**

**Model:** Cost of control

From the following balance sheets of H Ltd. and its subsidiary S Ltd. as on 31 December 2017, prepare consolidated balance sheet.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Rs.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities &amp; Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share Capital :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares of Rs. 50 each</td>
<td>5,00,000</td>
<td>2,00,000</td>
</tr>
<tr>
<td>Creditors</td>
<td>1,00,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Reserves</td>
<td>--</td>
<td>10,000</td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>50,000</td>
<td>30,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,50,000</td>
<td>2,60,000</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry Assets :</td>
<td>350000</td>
<td>260000</td>
</tr>
<tr>
<td>Investment in the shares of S Ltd 4,000 shares (at cost)</td>
<td>300000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,50,000</td>
<td>2,60,000</td>
</tr>
</tbody>
</table>
Lesson 7  Consolidation of Accounts as per Companies Act, 2013  237

H Ltd. purchase shares in S Ltd. on the balance sheet date.

Solution

Computation of Cost Of Control (goodwill):

Step 1: Cost price of shares in S Ltd. (investment) Give:
Step 2: Less: Face value of shares:
Step 3: Less: Share in Reserves:
Step 4: Less: Share in Profit (P&L A/c):

∴ Cost of Control or Goodwill:

Consolidated Balance Sheet of
H Ltd. & S Ltd.
as on 31.12.2017

I. EQUITIES AND LIABILITIES

1. Shareholders’ funds
   a. Share Capital
      50,000 shares of Rs. 10 each (H Ltd. only)
   b. Reserve & surplus

2. Other Liabilities
   H Ltd.
   S Ltd.

II. ASSETS

1. Sundry Assets
   H Ltd.
   S Ltd.
   Goodwill

Illustration 4.
Model: Capital reserve

From the following balance sheets of H Ltd. and its subsidiary S Ltd. as on 31st December 2017, prepare a consolidated balance sheet.
## Liabilities

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>H Ltd. (Rs.)</th>
<th>S Ltd. (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Shares of Rs.100 each)</td>
<td>6,00,000</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Creditors</td>
<td>2,00,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Reserve</td>
<td>40,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>70,000</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,10,000</strong></td>
<td><strong>4,85,000</strong></td>
</tr>
<tr>
<td>Sundry Assets</td>
<td>5,00,000</td>
<td>4,85,000</td>
</tr>
<tr>
<td>Investment in 4,000</td>
<td>4,10,000</td>
<td></td>
</tr>
<tr>
<td>Shares of S. Ltd. (on 31st December 2010)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,10,000</strong></td>
<td><strong>4,85,000</strong></td>
</tr>
</tbody>
</table>

### Computation of Capital Reserve:

**Step 1:** Cost price of shares (on 31.12.17) : 4,10,000

**Step 2:** Less : Paid – up value of shares (face value) : 4,00,000

**Difference**

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Less : (Proportionate) Shares in Reserve 100%</th>
<th>:</th>
<th>(20,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less : 100% share in profit (P&amp;L A/c)</td>
<td>:</td>
<td>(15,000)</td>
</tr>
<tr>
<td></td>
<td>Less : Capital Reserve</td>
<td>:</td>
<td>(25,000)</td>
</tr>
</tbody>
</table>

### Consolidated Balance Sheet of H Ltd. and Its Subsidiary S Ltd.

**As on 31.12.2017**

<table>
<thead>
<tr>
<th>I. EQUITIES AND LIABILITIES</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
</tr>
<tr>
<td>a. Share Capital of H Ltd.</td>
<td>6,00,000</td>
</tr>
<tr>
<td>b. Reserve &amp; surplus</td>
<td></td>
</tr>
<tr>
<td>Capital Reserve</td>
<td>25,000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>40,000</td>
</tr>
<tr>
<td>P &amp; L A/c</td>
<td>70,000</td>
</tr>
<tr>
<td>2. Other Liabilities</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>2,00,000</td>
</tr>
<tr>
<td>S Ltd.</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,85,000</strong></td>
</tr>
</tbody>
</table>
Consolidation of Accounts as per Companies Act, 2013

<table>
<thead>
<tr>
<th>II. ASSETS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sundry Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>5,00,000</td>
<td></td>
</tr>
<tr>
<td>S Ltd.</td>
<td>4,85,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,85,000</td>
<td></td>
</tr>
</tbody>
</table>

**Pre-acquisition Profits/Reserves**

The subsidiary company, on the date of acquisition of shares by the holding company, is having balances at the profit and loss and reserves accounts. The holding company not only purchase shares but also entitled to purchase a certain proportion of profit and reserves. Such accumulated profits of the subsidiary company existing on the date of acquisition are known as ‘pre-acquisition profits’ or ‘capital profits’. They include capital reserve, general reserve, share premium, P&L A/c.

For calculation the share of the holding company, reserves and profits are split into the following:

1. **Pre-acquisition profits / reserve**
   - (i) **Pre-acquisition profits**:
     Treatment: They are treated as capital profits. They are to be included in capital reserves and adjusted against goodwill.
   - (ii) **Pre-acquisition reserves**:  
     Treatment: Same as pre-acquisition profit.

2. **Post-acquisition profit/reserve**
   - (i) **Post-acquisition profits**:
     Treatment: They are treated as revenue profits. They are to be added to the surplus or profits of the company.
   - (ii) **Post-acquisition reserves**: They are to be added to general reserves.

**Important notes**:

1. Capital reserves of the holding company must be adjusted with goodwill as both cannot be shown at a time in the balance sheet.
2. When computing the share of minority interest, a distinction should not be made between pre-acquisition and post-acquisition profits/reserves.
3. A distinction between the pre and post-acquisition profit/reserves has to be made for accumulated profits/reserves of the subsidiary company for determining the share of the holding company.
Illustration 5.

Model: Pre-acquisition profit/reserves

From the following information, prepare a consolidated balance sheet

<table>
<thead>
<tr>
<th>Particulars</th>
<th>H Ltd. Rs.</th>
<th>S Ltd. Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities &amp; Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share Capital</td>
<td>2,00,000</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Shares of Rs.10 each</td>
<td>50,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Reserves</td>
<td>20,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>30,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Creditors</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,00,000</td>
<td>1,50,000</td>
</tr>
<tr>
<td>Sundry Assets</td>
<td>220000</td>
<td>1,50,000</td>
</tr>
<tr>
<td>Investments</td>
<td>80000</td>
<td></td>
</tr>
<tr>
<td>6,000 Shares of S Ltd</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,00,000</td>
<td>1,50,000</td>
</tr>
</tbody>
</table>

H Ltd. Acquired its shares in S Ltd. on 1 January 2017 when reserves of S Ltd. stood at Rs.4,000 and its profit and loss account (Cr.) was Rs.5,000

Solution

Basic Calculations:

1. Calculation of H Ltd.'s share in capital profit and reserve:
   
   \[
   \text{Step 1: Ratio of Equity Acquired and Held by Minority Interests:}
   \]
   
   \[
   \text{Total number of shares} = \frac{1,00,000}{10} = 10,000 \text{ Shares}
   \]
   
   Number of shares acquired by H Ltd. = 6,000 Shares
   Number of shares held by minority interest by H Ltd. = 4,000 Shares
   
   \[
   \therefore \text{Ratio of Shares Acquired and Held by Minority Interest}
   \]
   
   6,000 : 4,000
   
   or 6 : 4 or 3 : 2
Lesson 7  Consolidation of Accounts as per Companies Act, 2013

Step 2: Shares in Pre-acquisition profit: \( \frac{3}{5} \times \text{Rs. 5,000} = 3,000 \)
Step 2: Share in Pre-acquisition reserves: \( \frac{3}{5} \times \text{Rs. 4,000} = 2,400 \)
Step 3: Total amount to be transferred to capital reserve or to be adjusted against goodwill: \( 5,400 \)

2. Calculation of Goodwill

Step 1: Investment in shares of S Ltd.: \( 80,000 \)
Step 2: Less: Face Value of Shares Held \( (6,000 \times \text{Rs. 10}) \): \( 60,000 \)
Step 3: Less: Company’s share of Pre-acquisition profit & reserve: \( 20,000 \)
(Ref: Basic calculation 1 step 3) i.e. capital reserve: \( 5,400 \)
\( 14,600 \)

3. Calculation of H Ltd.’s Share in Revenue Profit & Reserves:
   (i) Balance in Reserve Account (Given): \( 20,000 \)
   Less: Pre-acquisition Reserve (Given): \( 4,000 \)
   \( \therefore \) Post-acquisition Reserve: \( 16,000 \)
   of this, H Ltd.’s Share = \( \frac{3}{5} \times \text{Rs. 16,000} = 9,600 \)
   (ii) Balance in P&L A/c (Given): \( 10,000 \)
   Less: pre-acquisition profit (Given): \( 5,000 \)
   \( \therefore \) Post-acquisition profit:
   Of this, H Ltd.’s share = \( \frac{3}{5} \times \text{Rs. 5,000} = 3,000 \)

4. Computation of Minority Interest:
   (i) Nominal value of equity shares held:
   4,000 shares \( (10,000 - \text{H Ltd.’s acquisition 6,000}) \times \text{Rs. 10} \): \( 40,000 \)
   (ii) Share: \( \frac{2}{5} \) i.e. minority shareholder’s share
   Their share in reserve: \( \frac{2}{5} \times \text{Rs. 20,000} = 8,000 \)
   (iii) Share in profit = \( \frac{2}{5} \times 10,000 = 4,000 \)
**Consolidated Balance Sheet of**

**H Ltd. and Its Subsidiary S Ltd.**

**As on 31 December 2017**

<table>
<thead>
<tr>
<th>I. EQUITIES AND LIABILITIES</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
</tr>
<tr>
<td>a. Share Capital : 20000 shares of Rs. 10 each</td>
<td>2,00,000</td>
</tr>
<tr>
<td>b. Reserve &amp; surplus</td>
<td></td>
</tr>
<tr>
<td>General Reserve H Ltd.</td>
<td>50,000</td>
</tr>
<tr>
<td>Shares in S Ltd.</td>
<td>9,600</td>
</tr>
<tr>
<td>P &amp; L A/c of H Ltd.</td>
<td>20,000</td>
</tr>
<tr>
<td>Share in S Ltd.</td>
<td>3,000</td>
</tr>
<tr>
<td>2. Minority Interest</td>
<td>52,000</td>
</tr>
<tr>
<td>3. Other Liabilities</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>30,000</td>
</tr>
<tr>
<td>S Ltd.</td>
<td>20,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,84,600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. ASSETS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sundry Assets</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>2,20,000</td>
</tr>
<tr>
<td>S Ltd.</td>
<td>1,50,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>14,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,84,600</td>
</tr>
</tbody>
</table>

**Inter-Company Transactions (Elimination of Common Transactions or Mutual Obligation or Mutual Indebtedness)**

The companies in a group, i.e. the holding company and the subsidiary company, may trade each other. They owe money to each other on account of common transactions like buying and selling of goods, lending and borrowing of money, rendering service to each other and the like. This will culminate in common accounts appearing in the balance sheets of holding company as well as its subsidiaries. While preparing consolidated balance sheet, all such mutual obligations should be eliminated.

**Debtors and Creditors**

Transactions with respect to sale and purchase of goods on credit take place between the holding company and its subsidiaries. This will result in mutual indebtedness as debtors in the balance sheet of the company which sells goods and as creditors in the balance sheet of the company which purchases those goods on credit.

**Treatment :**

(i) If the same amount appears in both the companies, they can be eliminated by deducting common amounts both from the debtors and by creditors (thus by reducing on both sides of the consolidated balance sheet).
(ii) If there is any difference between the two, it may be due to cash-in-transit or goods-in-transit. Such ‘transit’ amount is to be reduced from the side on which higher amount is shown. Further, this item (cash or goods in transit) is to be shown on the assets side of the balance sheet as a separate item.

**Loans Payable and Receivable**

Loans are advanced to subsidiaries by the holding company or vice versa. It is shown as an asset in the balance sheet of the company which advances the loan and as a liability in the balance sheet of the company which receives that loan.

If interest on the loans is outstanding, the P&L A/c of the lender company will be credited with the amount of interest due. Loan account of the company that borrowed the loan will be debited.

In consolidated balance sheet, both loan and interest should be eliminated.

**Bills Receivable and Bills Payable**

Bills of exchange of the holding and subsidiary companies will include bills accepted and drawn by each other. To that extent, such bills which are included in the bills receivable should be eliminated while preparing the consolidated balance sheet. However, any bills endorsed or discounted causing a liability to a third party has to be shown as a separate item on the assets side of the balance sheet.

**Services Rendered**

Companies owing for services rendered, if entry is already passed by both the companies, should be subtracted from respective items in the balance sheet.

In case no entry is entered till now, such amount should be reduced from revenue profit of the subsidiary company and added to the P&L A/c of the holding company.

**Revaluation of Assets**

When a holding company acquires shares in a subsidiary company, fixed assets of subsidiary company are valued in order to assess its correct value of shares. Any profit or loss on revaluation of assets has to be shown in the consolidated balance sheet.

- Any increase in the value of any fixed assets is to be treated as capital profits, whether it is in pre-or-post-acquisition period.
- Such capital profits will be apportioned between capital reserve and minority interests.
- The proportion of increase of the holding company is to be taken to investment account. This will reduce the cost of control/goodwill.
- In case, any decrease in the value of fixed assets is to be treated as capital loss. This will increase the cost of control/goodwill or reduce the capital reserve. But, it is a revenue loss, if the revaluation occurs in the post-acquisition period.
- Adjustment for depreciation.
  
  (i) If the value of fixed assets increases (revaluation profit), depreciation charge also will be increased accordingly. This is to be deducted from the revenue profits of the subsidiary company.
  
  (ii) If the value of fixed assets decreases, depreciation will also be decreased proportionately. This is to be added to the revenue profits of the subsidiary company.
Illustration 6.

Model: Revaluation of assets-profit

The following are the balance sheet of P Ltd., and its subsidiary Q Ltd., as at 31 March 2017:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>P Ltd.</th>
<th>Q Ltd.</th>
<th>Assets</th>
<th>P Ltd.</th>
<th>Q Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs.</td>
<td>Rs.</td>
<td></td>
<td>Rs.</td>
<td>Rs.</td>
</tr>
<tr>
<td>Equity shares of Rs.100</td>
<td>16,00,000</td>
<td>4,00,000</td>
<td>Equipment</td>
<td>10,00,000</td>
<td>3,80,000</td>
</tr>
<tr>
<td>Each Profit &amp; Loss A/c</td>
<td>2,00,000</td>
<td>80,000</td>
<td>Investment :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Liabilities</td>
<td>30,00,000</td>
<td>19,20,000</td>
<td>3,600 equity shares in Q Ltd. on 1 April 2010</td>
<td>5,60,000</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Other Assets</td>
<td>32,40,000</td>
<td>20,20,000</td>
</tr>
<tr>
<td>Total</td>
<td>48,00,000</td>
<td>24,00,000</td>
<td>Total</td>
<td>48,00,000</td>
<td>24,00,000</td>
</tr>
</tbody>
</table>

On 1 April 2017 P&L A/c of Q Ltd. showed a credit balance of Rs.32,000 and equipment of Q Ltd., was revalued by P Ltd., 20% above its book value of Rs.4,00,000 (but no such adjustment effected in the books of Q Ltd.) prepare the consolidated balance sheet as at 31 March 2017.

Solution

Calculations:

I: Calculation of Pre-acquisition profits:

(i) Balance on 1 April 2017 32,000

(ii) Share of P Ltd i.e. 90% x Rs.32,000 28,800

(iii) Minority Interest [(i) – (ii)] 3,200

II: Revaluation of Equipment:

(i) Profit on revaluation (20% x Rs. 4,00,000) 80,000

(ii) Share of P Ltd (i.e. 90/100 x 80,000) 72,000

(iii) Minority share [(i) – (ii)] 8,000

III: Calculation of Additional Depreciation:

(i) Book value on 1 April 2017 4,00,000

(ii) Less : Book value on 31 March 2018 3,80,000

(iii) Depreciation [(i) – (ii)] 20,000

(iv) Rate of Depreciation = \( \frac{20,000}{4,00,000} \times 100 = 5\% \)

(v) \( \therefore \) Additional Depreciation on Rs.80,000 4,000

\[ 5\% = \frac{5}{100} \times \text{Rs.80,000} \]

IV: Calculation of Post-acquisition of profit:
### Lesson 7  Consolidation of Accounts as per Companies Act, 2013

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Balance on 31 March 2018</td>
<td>80,000</td>
</tr>
<tr>
<td>(ii)</td>
<td>Less : Balance on 31 March 2017</td>
<td>32,000</td>
</tr>
<tr>
<td>(iii)</td>
<td>Less: Additional Depreciation (Ref: III)</td>
<td>4,000</td>
</tr>
<tr>
<td>(iv)</td>
<td>Less: Share of P. Ltd. $100 \times 44,000</td>
<td>39,600</td>
</tr>
<tr>
<td>(v)</td>
<td>Minority Interest [(iii) – (iv)]</td>
<td>4,400</td>
</tr>
</tbody>
</table>

### V: Calculation of Cost of Control:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Cost of Investment in share of Q Ltd.</td>
<td>5,60,000</td>
</tr>
<tr>
<td>(ii)</td>
<td>Less : Paid-up Capital Held</td>
<td>3,60,000</td>
</tr>
<tr>
<td>(iii)</td>
<td>Less : Capital Profit-Pre-acquisition</td>
<td>28,800</td>
</tr>
<tr>
<td>(iv)</td>
<td>Less : Revaluation of Equipment (Capital Profit)</td>
<td>72,000</td>
</tr>
</tbody>
</table>

### VI: Computation of Minority Interest:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Paid-up value of shares held</td>
<td>40,000</td>
</tr>
<tr>
<td>(ii)</td>
<td>Add : Share of Pre-acquisition profit :</td>
<td>3,200</td>
</tr>
<tr>
<td></td>
<td>[Ref: I (iii) i.e. $\frac{1}{10} \times 32,000$]</td>
<td>43,200</td>
</tr>
<tr>
<td>(iii)</td>
<td>Add : Share of Profit on Revaluation</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>[Ref: II (iii) i.e. $\frac{1}{10} \times \text{Rs.80,000}$]</td>
<td>51,200</td>
</tr>
<tr>
<td>(iv)</td>
<td>Add : Share of Post-acquisition profit</td>
<td>4,400</td>
</tr>
<tr>
<td></td>
<td>[Ref: IV (v) i.e. $\frac{1}{10} \times \text{Rs.44,000}$]</td>
<td>55,600</td>
</tr>
</tbody>
</table>
Consolidated Balance Sheet of  
P Ltd. and its Subsidiary Q Ltd.  
as on 31 March 2017

I. EQUITIES AND LIABILITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
</tr>
<tr>
<td>a. Share Capital</td>
<td>16,00,000</td>
</tr>
<tr>
<td>16000 shares of Rs. 100 each</td>
<td></td>
</tr>
<tr>
<td>b. Reserve &amp; surplus</td>
<td>2,00,00</td>
</tr>
<tr>
<td>General Reserve P Ltd.</td>
<td></td>
</tr>
<tr>
<td>P &amp; L A/c</td>
<td></td>
</tr>
<tr>
<td>Share in Q Ltd.</td>
<td>39,600</td>
</tr>
<tr>
<td>2. Minority Interest</td>
<td>59,600</td>
</tr>
<tr>
<td>3. Other Liabilities</td>
<td></td>
</tr>
<tr>
<td>P Ltd.</td>
<td>30,00,000</td>
</tr>
<tr>
<td>Q Ltd.</td>
<td>19,20,000</td>
</tr>
<tr>
<td>Total</td>
<td>68,15,200</td>
</tr>
</tbody>
</table>

II. ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fixed Assets</td>
<td></td>
</tr>
<tr>
<td>P Ltd.</td>
<td>10,00,00</td>
</tr>
<tr>
<td>Q Ltd.</td>
<td>4,80,000</td>
</tr>
<tr>
<td>Depreciation 5% on 4,80,000</td>
<td>14,80,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>24,000</td>
</tr>
<tr>
<td></td>
<td>14,56,000</td>
</tr>
<tr>
<td>2. Other Assets</td>
<td>99,200</td>
</tr>
<tr>
<td>P Ltd.</td>
<td>32,40,000</td>
</tr>
<tr>
<td>Q Ltd.</td>
<td>20,20,000</td>
</tr>
<tr>
<td>Total</td>
<td>68,15,200</td>
</tr>
</tbody>
</table>

Bonus Shares Issued by Subsidiary Company

A subsidiary company (after the holding company acquired controlling interest) may issue bonus share out of its profits to all the shareholders. This will increase the number of shares with the holding company. Naturally, the face value of shares held in the subsidiary company will also increase, as the holding company receives such bonus shares.

**Treatment** : ‘Source of profit’ out of which the bonus issued is the basis of accounting treatment. They are :

1. Bonus shares issued out of capital profit (or) pre-acquisition profits
2. Bonus shares issued out of revenue profits (or) post-acquisition profits

1. **Bonus issue out of capital profits** : This does not have any accounting effect. The reason is that while
Lesson 7  Consolidation of Accounts as per Companies Act, 2013  247
determining the cost of control/goodwill, the share of the holding company in the pre-acquisition profit is reduced and the paid-up value of shares held is increased. At this juncture, the issue of bonus shares will in no way affect the cost of control. Minority share of the bonus is added to the minority interest.

2. **Bonus issue out of revenue profits**: This has its effect on the consolidated balance sheet. The amount of bonus is reduced from revenue before apportioning the revenue profits in the holding minority ratio.

While calculating "cost of control" the holding company’s share of bonus is deducted. This will result in decrease in goodwill to the extent of the holding company’s share of bonus. Minority share of the bonus is added to the minority interest.

Net result is that the bonus issue is in the nature of capital profits whether they are issued out of capital profits or out of revenue profits.

**Illustration 7.**

Model: Bonus shares issued out of revenue profits

The summarized balance sheet of H Ltd. and S Ltd. as on 31 December 2017 are as follows:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>H Ltd. Rs.</th>
<th>S Ltd. Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Rs.10 each</td>
<td>15,00,000</td>
<td>3,00,000</td>
</tr>
<tr>
<td>Reserves</td>
<td>2,40,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>1,80,000</td>
<td>1,20,000</td>
</tr>
<tr>
<td>Total</td>
<td>19,20,000</td>
<td>5,10,000</td>
</tr>
<tr>
<td>Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry Assets</td>
<td>15,00,000</td>
<td>5,10,000</td>
</tr>
<tr>
<td>24,000 shares in S Ltd.</td>
<td>4,20,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19,20,000</td>
<td>5,10,000</td>
</tr>
</tbody>
</table>

S Ltd. had reserves of Rs.90,000 when H Ltd. acquired the shares in S Ltd. but the P&L A/c balance of S Ltd. was fully earned after the purchase of shares.

S Ltd. decided to issue bonus shares out of the post-acquisition profit in the ratio of 2 shares for every S shares held.

Calculate the cost of control before the issue of bonus shares and after the issue of bonus shares.

**Solution**

I: Calculation of Cost of Control before the issue of Bonus Shares:

| Step 1: | Amount paid by H Ltd. in purchase of shares in S Ltd | 4,20,000 |
| Step 2: | Less : Face value of shares acquired 24,000 x Rs.10 | 2,40,000 |
| Solution: |                              | 1,80,000 |

| Step 3 : | Less : H Ltd’s share of capital profits $90,000 \times \frac{8}{10} \left( \frac{4}{5} \right) | 72,000 |
| Step 4 : | Cost of Control/Goodwill | 1,08,000 |
II: Calculation of Cost of Control After the issue of Bonus Shares :  

**Step 1:** Amount paid by H Ltd. for purchase of shares in S Ltd.  
4,20,000

**Step 2:** Less : Face value of shares required (24,000 x Rs.10)  
2,40,000

**Step 3:** Less : H Ltd's share of capital profits 90,000 x 8/10  
72,000

**Step 4:** Less : H Ltd's Share of Bonus  
96,000

**Step 5:** Cost of control goodwill  
12,000

**Dividend**

A subsidiary company can declare dividend on its shares. The holding company will receive such dividends on the paid-up value of the shares held by it. The source from which the dividend to be paid may be any of the following categories.

**Category I:** Payment of dividends entirely from the pre-acquisition profits :

**Treatment:** It is treated as capital gains.

- On receipt of dividend, the following entry has to be passed:
  
  Bank A/c Dr. .....  
  To investments in shares of subsidiary company A/c .....  

- This type of dividends will not be utilized for distributing dividends to the shareholders of the holding company.

**Important notes:**

(i) If the dividend is paid wholly out of pre-acquisition profits, it has to be appropriated from previous years profits.

(ii) Holding company’s share has to be adjusted towards cost of control or capital reserve.

(iii) Holding company’s share has to be deducted from the consolidated P&L A/c

(iv) If by mistake this type of dividend is credited to P&L A/c of the holding company, it has to be rectified by debiting P&L A/c and crediting investment A/c.

**Category II:** Payment of dividends entirely from post-acquisition profits :

- It is treated as revenue income

- **Entry :**
  
  Bank A/c Dr. .....  
  To P&L A/c of the holding company. .....  

- This type of dividend partly out of pre-acquisition profits and partly out of post-acquisition profits.

The main point to be observed is that the dividend up to the date of acquisition (pre-acquisition) is to be treated as capital profit (capital receipt) and after the date of acquisition (post-acquisition) is to be treated as revenue profit (revenue receipt).
Accounting Treatment:

(i) For pre-acquisition profit: (capital profit)
   (as in category I)
   
   Bank A/c  Dr. ...
   To investment in shares of subsidiary company ......

(ii) For post-acquisition profit: (revenue receipt)
   (as in category II)
   
   Bank A/c  Dr. ...
   To profit & loss A/c ....
   In a combined (compound) entry as follows:
   
   Bank A/c  Dr. ....
   To Investment in shares of subsidiary company ......
   To P&L A/c

This means that the proportion of dividend out of pre-acquisition profit has to be credited to investment account and the proportion of dividend out of post-acquisition profit has to be credited to profit and loss account.

**Goodwill (Goodwill Appearing in the Balance Sheet of Subsidiary Company)**

If, the goodwill is shown in the balance sheet of the subsidiary company. That means goodwill already exists.

**Accounting Treatment:**

**Approach I: Add**: Goodwill already appearing in the balance sheet of subsidiary company to the goodwill and/or cost of control in the consolidated balance sheet.

**Approach II: Add**: Only holding company’s share to the cost of control/goodwill, from the goodwill of the subsidiary company.

**Illustration 8.**

Model: Dividends paid out of pre-acquisition profits and goodwill of subsidiary company.

From the following Balance Sheets of a holding company and its subsidiary on 31 March 2018, prepare consolidated balance sheet.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>H Ltd. Rs.</th>
<th>S Ltd. Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equities &amp; Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>15,00,000</td>
<td>6,00,000</td>
</tr>
<tr>
<td>Shares of Rs. 10 each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General reserve</td>
<td>2,40,000</td>
<td>1,80,000</td>
</tr>
<tr>
<td>P&amp;L Account</td>
<td>2,70,000</td>
<td>2,10,000</td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td>1,50,000</td>
<td>1,20,000</td>
</tr>
<tr>
<td>Outstanding expenses</td>
<td>60,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>
Assets:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>90,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Machinery</td>
<td>9,00,000</td>
<td>4,50,000</td>
</tr>
<tr>
<td>Stock</td>
<td>2,40,000</td>
<td>1,50,000</td>
</tr>
<tr>
<td>Debtors</td>
<td>3,60,000</td>
<td>4,80,000</td>
</tr>
<tr>
<td>Cash and Bank</td>
<td>60,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Investments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48,000 shares in S Ltd</td>
<td>5,70,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22,20,000</td>
<td>11,40,000</td>
</tr>
</tbody>
</table>

When control was acquired S Ltd. had Rs.1,20,000 in general reserve and Rs.90,000 in profit and loss account. Immediately on purchase of shares, H Ltd. received Rs.48,000 as dividend from S Ltd. which was credited to profit and loss account. Debtors of H Ltd., include Rs.60,000 due from S Ltd. whereas creditors of S Ltd. include Rs.45,000 due to H Ltd., the difference being accounted for by a cheque-in-transfer.

Solution

**Step 1:** Determination of Holding-Minority Ratio:

(i) H Ltd’s investment in S Ltd : 48,000 Shares

(ii) Minority state in S Ltd. : 12,000 shares

\[(60,000 \text{ shares} - 48,000 \text{ shares})\]

(iii) \[\therefore \text{Holding – Minority Ratio} = \frac{48,000}{12,000} = 4:1\]

\[(\text{i.e.} \text{H Ltd} \ \frac{4}{5} \text{ and S Ltd.} \ \frac{1}{5})\]

**Step 2:** Determination of H Ltd’s share in capital profits and reserves

(i) Balance in Reserve (pre-acquisition) \[1,20,000\]

\[(\text{Given in Additional Information })\]

(ii) Add : Balance in P&L A/c (Pre-acquisition) \[90,000\]

\[(\text{Given in Additional information})\]

(iii) Less : Dividends Paid :

\[
\begin{align*}
\text{Shares} & : \text{Dividend} \\
48,000 & : 48,000 \\
60,000 & \chi \\
\end{align*}
\]

\[
\chi = \frac{48,000 \times 60,000}{48,000} = 60,000 \quad \text{Rs.60,000}
\]

(iv) Total Capital Profit = \[1,50,000\]

(v) H Ltd’s share = \(\left(\frac{4}{5} \times \text{Rs.} 1,50,000\right)\) \[1,20,000\]

(vi) S Ltd’s share (Minority) \(\frac{1}{5} \times \text{Rs.}1,50,000 = 30,000\]
Step 3 : Determination of Current Year’s Profit :

(i) Balance of Profits as on 31 March 2018 (Ref Balance Sheet)  
2,10,000

(ii) Less : Pre-acquisition profits after deducting dividends paid

[Ref: Step 2 (iii)]

(Rs.90,000 – Rs.60,000)  
30,000

(iii) Profits During the year  
1,80,000

(iv) H Ltd’s share \( \left( \frac{1}{5} \times Rs.1,80,000 \right) \)  
1,44,000

(v) S Ltd.’s share \( \left( \frac{1}{5} \times Rs.1,80,000 \right) \)  
36,000

Step 4 : Determination of share in general reserve :

(i) Balance of Profits as on 31 March 2018  
(shown in balance sheet) 
1,80,000

(ii) Less : Pre-acquisition reserve

(Given in Additional information) 
1,20,000

(iii) Transfer to reserve in the year  
60,000

(iv) Share of H Ltd’s \( \left( \frac{1}{5} \times Rs.60,000 \right) \)  
48,000

(v) Share of S Ltd.’s \( \left( \frac{1}{5} \times Rs.60,000 \right) \)  
12,000

Step 5 : Determination of Goodwill/Capital Reserve :

(i) Cost of investment in share of S Ltd.  
(Shown in Balance Sheet) 
5,70,000

(ii) Less : Paid-up value of shares held (48,000 shares x Rs.10)  
4,80,000

90,000

(iii) Less : Dividends paid out from pre-acquisition profit (Given)  
48,000

(iv) Add : Goodwill :

H Ltd.  
90,000

S Ltd.  
30,000

1,20,000

1,62,000

(v) Less : Capital profits [Ref : Step 2 (v)]  
1,20,000

(vi) Goodwill – To be shown in consolidated balance sheet  
42,000

Step 6 : Ascertainment of Minority Interest :

(i) Face value of Minority Shares Held

(12,000 shares x Rs.10)  
1,20,000
Step 7: Construction of Consolidated Balance sheet:

Consolidated Balance Sheet of
H Ltd. and its subsidiary S Ltd.
As on 31.03.18

<table>
<thead>
<tr>
<th>I. EQUITIES AND LIABILITIES</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
</tr>
<tr>
<td>a. Share Capital</td>
<td>15,00,000</td>
</tr>
<tr>
<td>150,000 shares of Rs. 10 each</td>
<td></td>
</tr>
<tr>
<td>b. Reserve &amp; surplus</td>
<td></td>
</tr>
<tr>
<td>General Reserve</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>2,40,000</td>
</tr>
<tr>
<td>Share in S Ltd.</td>
<td>48,000</td>
</tr>
<tr>
<td>P &amp; L A/c</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>2,70,000</td>
</tr>
<tr>
<td>Share in Q Ltd.</td>
<td>1,44,000</td>
</tr>
<tr>
<td>Less: Dividend</td>
<td>48,000</td>
</tr>
<tr>
<td>2. Minority Interest</td>
<td>1,98,000</td>
</tr>
<tr>
<td>3. Current Liabilities &amp; Provisions</td>
<td>1,20,000</td>
</tr>
<tr>
<td>H Ltd.</td>
<td>1,50,000</td>
</tr>
<tr>
<td>S Ltd.</td>
<td></td>
</tr>
<tr>
<td>Less: Inter Company Debts</td>
<td>2,70,000</td>
</tr>
<tr>
<td>Outstanding Expenses:</td>
<td></td>
</tr>
<tr>
<td>H Ltd.</td>
<td>45,000</td>
</tr>
<tr>
<td>S Ltd.</td>
<td>60,000</td>
</tr>
<tr>
<td>Total</td>
<td>26,67,000</td>
</tr>
</tbody>
</table>
### II. ASSETS

1. **Fixed Assets**
   - **Machinery**
     - H Ltd.: 9,00,000
     - S Ltd.: 4,50,000
     - Goodwill: 13,50,000
   - **Current Assets**
     - **Stock:**
       - H Ltd.: 2,40,000
       - S Ltd.: 1,50,000
     - **Debtors:**
       - H Ltd.: 3,60,000
       - S Ltd.: 4,80,000
     - **Less: Inter Company Debts**
       - H Ltd.: 60,000
       - S Ltd.: 7,80,000
     - **Cash & Bank Balance**
       - H Ltd.: 60,000
       - S Ltd.: 30,000
     - **Cheque-in-transit**
       - 15,000

<table>
<thead>
<tr>
<th></th>
<th>H Ltd.</th>
<th>S Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>26,67,000</td>
<td></td>
</tr>
</tbody>
</table>

### Proposed Dividend

The amount of proposed dividend, if any, will appear in the balance sheet of subsidiary company. In such a use, the accounting treatment will be:

1. Such amount should be added to current year’s profits of the subsidiary company.
2. Then, cost of control and minority interest should be determined.
3. Its share in the proposed dividend should be deducted from minority interest.
4. Finally, it should be shown as a separate item on the liability side of the consolidated balance sheet under the head ‘Provisions’.
Holding company: As per section 2(46) of the Companies Act, 2013 "A company shall be deemed to be the holding company of another, if, but only if, that another is its subsidiary.

Subsidiary company: As per section 2(87) of the Companies Act, 2013, a company is a subsidiary of another company, if, but only if:

1. The other company controls the composition of its board of directors
   Or
2. The other company
   (a) Holds more than half in nominal values of its equity shares capital
   Or
   (b) It is a subsidiary of any company which is that of other company’s subsidiary consolidated P&L A/c and balance sheet mean a single P&L A/c and balance sheet of a holding company and all its subsidiaries (group).

Steps involved in the preparation of consolidated balance sheet and profit & loss A/c (Ref: Main text).

Various factors to be considered for the preparation of consolidated balance sheet of a holding company and its subsidiaries.

(i) Holding-minority ratio
(ii) Elimination of investment a/c
(iii) Minority interest
(iv) Cost of control/goodwill
(v) Pre-acquisition profit (capital profit)
(vi) Post-acquisition profit (revenue profit)
(vii) Revaluation of assets and liabilities
(viii) Depreciation
(ix) Bonus shares issued by subsidiary company
(x) Dividends from subsidiary company preference shares in subsidiary company
(xi) Preference shares in subsidiary company
(xii) Debentures in subsidiary company
(xiii) Mutual obligations
(xiv) Consignment liabilities
(xv) Unrealized profit in stock
(xvi) Post and pre-acquisition losses abnormal losses
(xvii) Preliminary expenses

Key Terms:

**Holding Company**: A company is said to be the holding company of another if that other company is its subsidiary.

**Subsidiary Company**: A company is said to be a subsidiary of another if that another company controls the composition of its board of directors (holding more than 50% of the nominal value of equity share capital).
Minority Interest: Holding of the general public (other than holding company) in a subsidiary company is termed as “minority interest”.

Cost of Control: The “excess” amount paid (more than face value or book value of shares) by the holding company to acquire ‘controlling interest’ in the subsidiary company.

Consolidated Balance Sheet: The balance sheet prepared by the holding company by incorporating all the assets and liabilities of its subsidiary company along with its own assets and liabilities.

SELF TEST QUESTIONS

1. H Ltd. acquired 15,000 equity shares in S Ltd. on 1 April 2017. On 31 December 2017 the balance sheet of S Ltd., was as follows:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Rs.</th>
<th>Assets</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital:</td>
<td></td>
<td>Sundry Assets</td>
<td>32,00,000</td>
</tr>
<tr>
<td>20,000 equity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Rs.100 each</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Reserve</td>
<td>4,00,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On 1 January 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P&amp;L A/c Rs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance on</td>
<td>5,00,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Jan. 2017</td>
<td>1,00,000</td>
<td>3,00,000</td>
<td></td>
</tr>
<tr>
<td>Profit for 2017</td>
<td>4,00,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32,00,000</td>
<td></td>
<td>32,00,000</td>
</tr>
</tbody>
</table>

Ascertain capital profits and revenue profits.

[Ans. Capital profits : Rs.6,00,000; Revenue profits: Rs.3,00,000]

2. Calculate minority interest from the balance sheet of Delhi Ltd.

Balance sheet of Delhi Ltd. as on 31 December 2017:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Rs.</th>
<th>Assets</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital:</td>
<td></td>
<td>Sundry Assets:</td>
<td>32,00,000</td>
</tr>
<tr>
<td>42,000 share of</td>
<td>42,00,000</td>
<td>Plant &amp; Machinery</td>
<td>21,00,000</td>
</tr>
<tr>
<td>Rs.100 each</td>
<td></td>
<td>Other Assets</td>
<td>4,50,000</td>
</tr>
<tr>
<td>General Reserve on 1st January 2017</td>
<td>18,00,000</td>
<td>Investment (80% of sheets)</td>
<td>19,50,000</td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td>9,00,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P&amp;L on 31 December 2017</td>
<td>6,00,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>75,00,000</td>
<td></td>
<td>75,00,000</td>
</tr>
</tbody>
</table>

Mumbai Ltd. acquired 80% of the shares at Rs.19,50,000.

[Ans: Minority interest : Rs.13,20,000]
3. On 30 June 2017, two-third of the shares of S Ltd. (with a total capital of Rs.48,00,000) was acquired by H Ltd. the balance sheet of S Ltd. showed a debit balance of Rs.24,00,000 or 1 January 2017 and a credit balance of Rs14,40,000 on 31 December 2017. The investment by H Ltd. in shares of S Ltd. is Rs.36,00,000. Calculate the cost of control or capital reserve.

[Ans. Cost of control/goodwill : Rs.7,20,000]

4. S Ltd. has a capital of Rs.45,00,000 in shares of Rs.100 each. Out of this, H Ltd. purchased 75% shares of Rs.52,50,000. The profit of S Ltd. at the time of purchase of shares by H Ltd. were Rs.22,50,000. S Ltd. decided to make a bonus issue out of capital profits of one share of Rs.100 each fully paid for every three shares held. Calculate the cost of control after the issue of bonus shares.

[Ans : Cost of control/goodwill : Rs.1,87,500]

5. Prepare Consolidated Balance sheet of X Ltd. & Y Ltd.

**Balance Sheet of X Ltd. and its Subsidiary Y Ltd.**

**As at 31 December 2017**

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>X Rs.</th>
<th>Y Rs.</th>
<th>Assets</th>
<th>X Rs.</th>
<th>Y Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital :</td>
<td>4,00,000</td>
<td>320</td>
<td>Land &amp; Buildings</td>
<td>304</td>
<td>--</td>
</tr>
<tr>
<td>Shares of Rs. 80</td>
<td>--</td>
<td>32</td>
<td>Plant &amp; Machinery</td>
<td>44.80</td>
<td>6.40</td>
</tr>
<tr>
<td>40,000 shares of Rs.80 each</td>
<td>--</td>
<td>--</td>
<td>Shares in Y Ltd. 36,000 shares of Rs.80 each stock</td>
<td>57.60</td>
<td>--</td>
</tr>
<tr>
<td>General Reserve</td>
<td>160</td>
<td>--</td>
<td>Debtors</td>
<td>96</td>
<td>16</td>
</tr>
<tr>
<td>Creditors</td>
<td>96</td>
<td>6.40</td>
<td>Cash at Bank</td>
<td>64</td>
<td>22.40</td>
</tr>
<tr>
<td>P&amp;L A/c</td>
<td>32</td>
<td>48</td>
<td></td>
<td>41.60</td>
<td>41.60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>608</td>
<td>86.40</td>
<td><strong>Total</strong></td>
<td>608</td>
<td>86.40</td>
</tr>
</tbody>
</table>

[Ans. : Minority interest : Rs.8,00,000; Capital reserve Rs.14,40,000; Balance sheet total : Rs.6,36,80,000]
Lesson 8
Corporate Financial Reporting

LESSON OUTLINE

- Concept of Corporate Financial Reporting
- Various Requirements of Corporate Reporting
- Auditor’s Report & Director’s Report
- Disclosure on Notes to Accounts
- Value Added Statements and its Advantages
- Extracts of Value-Added Statements
- Economic Value-Added (EVA) and its Advantages
- Market Value-Added and its advantages
- Shareholders’ Value-Added and its Advantages
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

This chapter seeks to enable you to develop knowledge and understanding of:

- The purpose of auditors report, its coverage as per the requirements of the Companies Act and other before issues.
- Qualification in the auditors report and corporate financial practices related thereof.
- The purpose of director’s report, its coverage as per the requirements of the Companies Act and other related issues.
- Corporate financial practices in respect of director’s response in their report, to auditors qualification.
- The objective and importance of corporate governance and contents of corporate governance report.
- The management discussion and analysis report, its contents and significance.
A company's annual report contains not only the financial statements, notes thereto and significant accounting policies followed in preparing them, but certain other financial reports as well. The most common and statutorily required reports are as under:

1. Auditor’s report
2. Directors’ report
3. Corporate governance report and within that or separately, management discussion, and analysis report.
4. Report on corporate social responsibility (CSR) activities.

The definition of Accounting suggests that “Accounting is Recording, classifying, summarizing, interpreting/reporting and analyzing the financial transactions in a systematic manner”. This information is studied by internal as well as external users. Its function is to provide quantifiable information, primarily financial in name, about economic entities, that is intended to be useful in making economic decisions and related choice among alternative course of action. Financial reporting may be defined as communication of published financial statement and related information from a business enterprise to all users. It is the reporting of accounting information of an entity to a user or group of users. It contains both qualitative and quantitative information.

The Financial report made to the management is generally known as internal reporting, while financial reporting made to the shareholder investors/management is known as external reporting. The internal reporting is a part of management information system, and is used for MIS reporting for the purpose of analysis, and as an aid in decision-making process.

The management of a corporate is ultimately responsible for the generation of accounting information. The accountability of a company has two distinct aspects – legal and social. Under legal requirements a company has to supply certain information to the various users through annual reports and under the social obligation, a company has to provide additional information to various user groups.

**Need for Corporate Reporting**

In accounting, Corporate Reporting is a very important issue nowadays. Various statues have prescribed certain statements to be disclosed periodically by a corporate entity. The purpose of such mandate is to convey a true and fair view of the operating results and the financial position to the users of financial reports. Within a corporate context, financial reporting covers three types of accounting data sets. These include a balance sheet, a statement of profit and loss and a statement of cash flows.

**Disclosure of Significant Accounting Policies**

As per AS 1 to ensure proper understanding of financial statements, it is necessary that all significant accounting policies adopted in the preparation and presentation of financial statements should be disclosed. Such disclosure should form part of the financial statements. It would be helpful to the reader of financial statements if they are all disclosed as such in one place instead of being scattered over several statements, schedules and notes.

In respect of reporting of accounting policies a company needs to follow following principles.

All significant accounting policies adopted in the preparation and presentation of financial statements should be disclosed.

The disclosure of the significant accounting policies as such should form part of the financial statements and the significant accounting policies should normally be disclosed in one place.

Any change in the accounting policies which has a material effect in the current period or which is reasonably
expected to have a material effect in later periods should be disclosed. In the case of a change in accounting policies which has a material effect in the current period, the amount by which any item in the financial statements is affected by such change should also be disclosed to the extent ascertainable. Where such amount is not ascertainable, wholly or in part, the fact should be indicated.

If the fundamental accounting assumptions, viz., Going Concern, Consistency and Accrual are followed in financial statements, specific disclosure is not required. If a fundamental accounting assumption is not followed, the fact should be disclosed.

**Features of Corporate Financial Reporting**

**Relevance:** Information is relevant when it influences the economic decisions of users by helping them to evaluate past, present, and future events to confirm/correct their past evaluations. The relevance of information is affected by its nature and materiality (which is always the threshold for relevance). Information overload, on the other hand, can obfuscate information, making it hard to sift the relevant nuggets and interpretation difficult.

**Reliability:** Information should be free from material errors and bias. The key aspects of reliability are faithful representation, priority of substance over form, neutrality, prudence, and completeness.

**Comparability:** Information should be presented in a consistent manner over time, and consistent between entities to enable users to make significant comparisons.

**Understandability:** Information should be readily understandable by users who are expected to have a reasonable knowledge of business, economies and accounting, and a willingness to study the information with reasonable diligence.

The process of producing useful information includes a number of decision points, which may constrain the amount of information provided. These include:

**Timelines:** A delay in reporting may improve reliability at the cost of relevance.

**Benefit v Cost:** Benefits derived from information should normally exceed the cost of providing it.

**Balancing of Qualitative Characteristics:** To meet the objectives of financial statements and make them adequate for a particular environment, providers of information must achieve an appropriate balance among the qualitative characteristics. The aim is to achieve a balance among characteristics in order to meet the objective of financial statements.

**Recent trends in Corporate Financial Reporting**

Investors, world over, are currently demanding more shareholder value than just high returns. Maximising shareholders value has always been the ultimate aim of every company. Investors are very keen in assessing the corporate financial performance that correlate with shareholders wealth, particularly the market price of a share. Traditional performance measures like return on investment, earnings per share have been used as the most important measure of shareholder value creation. But in the recent years, value based measures which measure performance in terms of change in value has received a lot of attention. There are several value based measures such as Cash Flow Return on Investment (CFROI), Shareholder Value-Added (SVA), Economic Value-Added (EVA), Market Value-Added (MVA) and Cash Value-Added (CVA) which are extensively used. Here we would be discussing about ‘value added statement’ ‘economic value-added’ ‘market value-added’ and ‘shareholder value-added’ measures.

**WHY CORPORATE FINANCIAL REPORTING?**

The objectives of financial reporting given by Financial Accounting Standard Board (FASB) are summarized as follows:
Financial reporting should provide information that is useful to investors and creditors and other users in making rational investment, credit and similar decisions.

The information should be useful to both, the present and potential investors.

1. Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources (obligations of the enterprise to transfer resources to other entities and owners equity) and the effects of transactions event, and circumstances that change resources and claims to those resources.

2. Financial reporting should provide information about the enterprise’s financial performance during a period. Investors and creditors often use information about the past to help in assessing the prospects of an enterprise.

3. Financial reporting should provide information about how management of an enterprise obtains and spends cash, its borrowing and repayment of borrowing, capital transactions including cash dividends and other distributions of enterprise resources to owners, and other factors that may affect an enterprise’s liquidity or solvency.

4. Financial reporting should provide information about how management of an enterprise has discharged its stewardship responsibilities to owners (shareholders) for the use of enterprise resource entrusted to it.

5. Financial reporting should provide information that is useful to management and directors in making decisions in the interest of owners.

AUDITORS REPORT

Requirements of the Companies Act

Section 143 of the Companies Act 2013 deals with the auditors report which should fulfil following requirement:

1. The auditor shall make a report to the members of the company on the accounts examined by him, and on every Balance Sheet and Profit and Loss account and on every other document, which is to be a part of or Annexed to the Balance Sheet or Profit and Loss Account.

2. The report shall state whether, in his opinion and to the best of his information and according to the explanations given to him the said accounts.
   (a) Give the information required by the Companies Act in the manner so required and ;
   (b) Give a true and fair view ;
       − In the case of the Balance Sheet, of the state of the company’s affairs as at the end of its financial year;
       − In the case of the Profit and Loss Account of the profit or loss in that financial year; and
       − In the case of the cash flow statement, of the cash flows for that financial year.

3. The auditor’s report shall also state:
   (a) Whether he has obtained all the information and explanations which to the best of his knowledge and belief were necessary for the purposes of his audit.
   (b) Whether, in his opinion, proper books of account as required by law have been kept by the company, and proper returns adequate for the purpose for his audit have been received from branches not visited by him.
(c) Whether the report on the accounts of any branch office audited by a person other than the company’s auditor has been forwarded to him, and how he has dealt with the same in preparing the auditor’s report.

(d) Whether the company’s Balance Sheet and Profit and Loss Account dealt with by the report are in agreement with the books of account and return.

(e) Whether, in his opinion, the Profit and Loss Account and Balance Sheet comply with the accounting standards.

(f) In thick type or in italics the observations or comments of the auditor’s which have any adverse effect on the functioning of the company.

(g) Whether any director is disqualified from being appointed as director under Sub-Section (2) of Section 164.

The clause mentioned above disqualifies a person from being appointed as a company director if such person is already a director of a public company which:

- Has not filed the annual accounts and annual returns for any continuous three financial years; or
- Has failed to repay its deposit or interest thereon on due date or redeem its debentures on due date or pay dividend on due date and such failure continues for one year or more.

4. Where any of the matters referred to in 2b or 3a to 3e above is answered in the negative, or with an attribute, the auditor’s report shall state the reasons for the answer.

5. The central government may direct that, in the case of such class or description of companies as may be specified, the auditor’s report shall also include a statement on such matters as may be specified therein.

**Companies (Auditors’ Report) Order, 2003 or CARO**

The Central Government had issued ‘The Manufacturing and Other Companies (Auditor’s Report) Order, 1988 popularly known as MAOCARO. It was replaced in 2003 by a new order known as CARO. The matters to be reported in the auditor’s report were revised and substantially expanded, thus placing greater responsibility upon the statutory auditors.

Applicability CARO is applicable to all Companies except the following:

1. Banking and Section 25 (not for profit) Companies.
2. A private limited company, which at any point of time during the financial year, complies with the following.
   - Paid-up capital and reserve not more than rupees fifty lakh.
   - Loan outstanding not exceeding rupees twenty-five lakh from any bank or financial institution, and
   - Turnover not exceeding rupees five crore

**Matters to be included in the auditor’s report**: The auditors’ report shall include a statement on the following matters.

1. **Fixed assets**:
   a. Whether the company is maintaining proper records showing full particulars, including quantitative details and situation of fixed assets?
   b. Whether these fixed assets have been physically verified by the management at reasonable
intervals; whether any material discrepancies were noticed on such verification and if so, whether the same have been properly dealt with in the books of accounts? and 

c. If a substantial part of fixed assets have been disposed of during the year, whether it has affected the going concern.

2. Inventory:

a. Whether physical verification of inventory has been conducted at reasonable intervals by the management?

b. Are the procedures of physical verification of inventory followed by the management reasonable and adequate in relation to the size of the company and the nature of its business? If not, the inadequacies in such procedures should be reported?

c. Whether the company is maintaining proper records of inventory? If any material discrepancies were noticed on physical verification, whether the same have been properly dealt with in the books of account.

3. Loans granted to/taken from companies and firms in which directors are interested:

a. Has the company granted any loans, secured or unsecured, to companies, firms or other parties covered in the register maintained under Section 301 of the Act? if so, give the number of parties and amount involved in the transactions.

b. Whether the rate of interest and other terms and conditions of loans given by the company, secured or unsecured, are prima facie prejudicial to the interest of the company?

c. Whether repayment of the principal amount and interest are also regular?

d. If overdue amount is more than lakhs, whether reasonable steps have been taken by the company for recovery of the principal and interest?

e. Has the company taken any loans, secured or unsecured, from companies, firm or other parties covered in the register maintained under Section 301 of the Act? if so, give the details of parties and the amount involved in the transactions.

f. Whether the rate of interest and other terms and conditions of loans taken by the company, secured or unsecured, are prima facie prejudicial to the interest of the company?

g. Whether payment of the principal amount and interest are also regular?

4. Internal control system:

Is there an adequate internal control system commensurate with the size of the company and the nature of its business for the purchase of inventory, and fixed assets and for the sale of goods and services? Whether there is a continuing failure to correct major weaknesses in internal control system.

5. Transactions (other than loans) with companies and firms in which directors are interested:

a. Whether the particulars of contracts or arrangements referred to in Section 301 of the act have been entered in the register required to be maintained under that section?

b. Whether transactions made in pursuance of such contracts and arrangements have been made at prices which are reasonable with regard to the prevailing market prices at the relevant time?

(This information is required only in case of transactions exceeding the value of five lakh rupees in respect of any party, and in any one financial year)
6. **Public deposits**:

In case the company has accepted deposits from the public, whether the directives issued by the Reserve Bank of India and the provisions of Section 58A and 58AA or any other relevant provisions of the Act and the rules framed thereunder, where applicable, have been complied with. If not, the nature of contraventions should be stated; if an order has been passed by company law board or National Company Law Tribunal or Reserve Bank of India or any court or any other tribunal whether the same has been complied with or not?

7. **Internal audit system**:

In the case of listed companies and/or other companies having a paid up capital and reserves exceeding Rs.50 lakhs was commitment for the financial year concerned or having an average arrival turnover exceeding five crore rupees for a period of three consecutive financial years immediately preceding the financial year concerned, it is important to see whether the company has an internal audit system commensurate with its size and nature of its business.

8. **Cost accounts and records**:

Where maintenance of cost records has been prescribed by the central government under clause (d) of Sub-Section (1) of Section 209 of the Act, whether such accounts and records have been made and maintained.

9. **Statutory dues**:

   a. Is the company regular in depositing undisputed statutory dues including provident fund investor education and protection fund, employees state insurance. Income tax. Sales tax. Wealth tax, Service tax, Custom Duty, Excise duty, Cess and any other statutory dues with the appropriate authorities and if not, the extent of the arrears of outstanding statutory does as at the last day of the financial year concerned for a period of more than six months from the date they became payable, shall be indicated by the auditor.

   b. In case dues to income tax/sales tax/service tax/custom duty/excise duty/cess have not been deposited on account of any dispute, then the amounts involved and the from where the dispute is pending may please be mentioned.

   (A mere representation to the department shall not constitute the dispute)

10. **Accumulated losses**:

Whether in case of a company which has been registered for a period not less than five years, in accumulated losses at the end of the financial year are not less than fifty per cent of net worth, and whether it has incurred cash losses in such financial year and in the immediately proceeding financial year.

11. **Default in repayment of loans**:

Whether the company has defaulted in repayment of loans to a financial institution or bank or debenture holders? If yes, the period and amount of default to be reported.

12. **Loans granted against securities (share etc)**:

Whether adequate documents and records are maintained in cases where the company has granted loans and advances on the basis of security by way of pledge of shares, debentures and other securities. If not, the deficiencies to be pointed out.

13. **Chit fund, Nidhi/mutual benefit fund/societies**

Whether the provisions of any special statute applicable to chit fund have been duty complied with? In respect of Nidhi/mutual benefit fund/societies:
a. Whether the net-owned funds to deposit liability ratio is more than 1:20 as on the date of balance sheet;

b. Whether the company has complied with the prudential norms on income recognition and provisioning against sub-standard/doubtful/loss assets;

c. Whether the company has adequate procedures for appraisal of credit proposals requests, assessment of credit needs and repayment capacity of the borrowers;

d. Whether the repayment schedule of various loans granted by the Nidhi is based on the repayment capacity of the borrower.

14. Companies dealing in securities:

If the company is dealing or trading in shares, securities, debentures and other investment, whether proper records have been maintained of the transactions and contracts and whether timely entries have been made therein, also whether the shares, securities, debentures and other investment have been held by the company, in its own name except to the extent of the exemption, if any, granted under Section 49 of the Act.

15. Third party guarantees:

Whether the company has given any guarantee for loans taken by others from bank or financial institutions? Whether the terms and conditions whereof are prejudicial to the interest of the company?

16. Application of loans for the intended purpose:

Whether term loans were applied for the purpose for which the loans were obtained.

17. Use of short-term funds for long-term investment:

Whether the funds raised on short-term basis have been used for long-term investment; if yes, the nature and amount is to be indicated.

18. Preferential allotment:

Whether the company has made any preferential allotment of shares to parties and companies covered in the register maintained under Section 301 of the Act, and if so whether the price at which shares have been issued is prejudicial to the interest of the company.

19. Creation of charge on debentures:

Whether security or charge has been created in respect of debentures issued?

20. End use of public issue:

Whether the management has disclosed the end use of money raised by public issues and the same has been verified.

21. Frauds:

Whether any fraud on or by the company has been noticed or reported during the year; if yes, the nature and the amount involved is to be indicated.

**DIRECTORS REPORT**

**Requirements of the Companies Act**

Section 134 of the Companies Act, 2013 deals with the director’s report and provided as under:

1. There shall be attached to every Balance Sheet laid before a company’s general body meeting, a report by its Board of Directors containing the following –
– The state of the company’s affairs.
– The amounts, if any, which it proposes to carry to any reserves in the balance sheet.
– The amount, if any, which it recommends should be paid by way of dividend.
– Material changes and commitments, if any, affecting the financial position of the company which
  have occurred between the end of the financial year and the date of the report,
– The conservation of energy; technology absorption, foreign exchange earnings and outgoing
  should be mentioned.
2. The Board’s report shall, so far as it is encouraging for the appreciation of the state of the company’s
   affairs by its members, and will not in the board’s opinion be harmful to the business of the company, or
   any of its subsidiaries, deal with any changes which have occurred during the financial year;
   – In the nature of the company’s business;
   – In the company’s subsidiaries or in the nature of their business; and
   – Generally in the classes of business in which the company has an interest.
3. The Board’s report shall also include directors’ responsibility statement, indicating therein
   – That in the preparation of the annual accounts, the applicable accounting standards had been
     followed along with proper explanation relating to material departures;
   – That the directors had selected such accounting policies and applied them consistently and made
     judgments and estimates that are reasonable and prudent so as to give a true and fair view of
     the state of affairs of the company at the end of the financial year, and of the profit or loss of the
     company for that period;
   – That the directors had taken proper and sufficient care for the maintenance of adequate accounting
     records in accordance with the provisions of this act for safeguarding the assets of the company
     and for preventing and detecting fraud and other irregularities;
   – That the directors had prepared the annual accounts on a going concern basis.
4. The board is also bound to give the fullest information and explanations, in its report on every reservation,
   qualification or adverse remark contained in the auditors report.
5. The board’s report has to specify the reasons for the failure, if any, to complete the buy-back within the
   time specified .
6. The Board’s report shall also include a statement showing the name of every employee of the company
   who:
   – If employed throughout the financial year, was in receipt of remuneration for that year which in
     the aggregate, was not less than the prescribed sum (Rs. 24 lacs per annum with effect from
     17.04.2002)
   – If a director was employed for a part of the financial year and had received remuneration for any
     part of that year, at a rate, which in the aggregate was not less than the sum, prescribed per month
     (Rs. 2 lacs per month with effect from 17.04.2002).
   – If employed throughout the financial year or part thereof, he was in receipt of remuneration in that
     year which in the aggregate, or as the case may be, at a rate which, in the aggregate, in excess
     of that drawn by the managing director, or whole time director, or manager who holds by himself
     or along with his spouse and dependent children, not less than two per cent of the equity shares
     of the company.
The report will specify whether any such employee is a relative of any director or manager of the company; if so, the name of such director has to be specified.

### VALUE ADDED STATEMENT

#### Introduction

Financial reporting has traditionally been concerned with the income statement, balance sheet and cash flow statement. Over the years, there have been initiatives to expand the financial reporting package. One of these was that the Corporate Report of the then Accounting Standard Steering Committee of Britain suggested the inclusion of a value-added statement (VAS) in 1975.

Value added can be defined as the value created by the activities of a firm and its employees, that is, sales minus the cost of bought in goods and services. The value-added statement (VAS) reports on the calculation of value-added and its allocation among the stakeholders in the company.

The value-added statement (VAS) is a voluntary disclosure and adds little information to that contained in the income statement. During the last two decades various theories have been used to explain voluntary and social disclosures. The fact that the VAS has attained such widespread publication despite being a relatively marginal disclosure, gives an early indication that the VAS is not a neutral corporate social disclosure, but that it could be used to benefit those publishing it. VAS is used to alter perceptions about the company and in this way to manage stakeholder expectations.

#### Definition and Background of Value-Added and the Value-Added Statement (VAS)

The concept of value-added was initially used in 1790 in the first North American Census of Production (Gillchrist 1970). Trench Cox, a treasury official, whose techniques have since been adopted by most industrial nations in the calculation of Gross National Product (GNP), was responsible for realizing that value-added would avoid double counting.

Value added has also been defined in the economic literature by Ruggles and Ruggles:

The value-added by a firm, i.e., the value created by the activities of the firm and its employees, can be measured by the difference between the market value of the goods that have been turned out by the firm and the cost of those goods and materials purchased from other producers. This measure will exclude the contribution made by other producers to the total value of the firm’s production, so that it is essentially equal to the market value created by this firm. (1965, 50)

The VAS is therefore based on an economic definition of value-added and calculates value-added in accordance with the calculation of GNP.

Suojanen (1954) suggests that the value-added concept for income assessment help the management satisfy the various interest groups by providing more information that was not possible from the income statement and balance sheet. This makes him one of the first writers to use the value-added concept in terms of accounting for the results of an enterprise.

In general words, “Value-added can be defined as wealth generated by the entity through the collective efforts of capital providers, management and employees”.

#### Distribution of Gross Value Addition

As per the concept of value added statement, gross value-added is distributed to employees in the form of salaries and wages, to government in the form of taxes and duties, to financer in the form of interest, to shareholders in the form of dividend the and remaining balance in business in the form of retained earning including depreciation.
**Value-Added Statement**

A simplified financial statement that shows how much wealth has been created by a company. A value-added statement calculates total output by adding sales, changes in stock, and other incomes, then subtracting depreciation, interest, taxation, dividends, and the amounts paid to suppliers and employees.

Such value-added can be taken to represent in monetary terms the net output of an enterprise. This is the difference between the total value of its output and the value of the inputs of materials and services obtained from other enterprises. The value-added is seen to be due to the combined efforts of capital, management and employees, and the statement shows how the value-added has been distributed among each of these factors.

**Advantages of Value-Added Statement** –

It is an alternative performance measure to profit and therefore helps in the comparison of the performance of the company. Value added is superior performance measure because it pays attention on inputs which are under the control of the management.

By employing various productivity measures like value-added per rupee of capital employed, value-added per rupee sales, value-added per employee, etc., it helps in judging the productivity of the company.

Resource allocation decisions are normally based on the concept of maximizing profit, but value-added statement provides a better alternative by focusing on other factors rather than just profit.

It also helps in devising the incentives schemes for the employees of the company in a better way.

It reflects a broader view of the company’s objectives and responsibilities rather than merely focusing on the small aspects of the company.

**Limitation of Value-Added Statement**

There is a duality associated with the VAS in that it reports on the calculation of value-added and its application among the stakeholders in the company. Many inconsistencies are found in practice in both the calculation and presentation of value-added in the VAS. These inconsistencies make the statement confusing, non-comparable and unverifiable. The main areas of inconsistencies include, though not limited to, the following:

The treatment of depreciation resulting in gross and net value-added;

The treatment of taxes like pay-as-you-earn, fringe benefits and other benefits in the employees’ share of value-added;

The timing of recognition of value-added production or sales;

The treatment of taxes such as VAT /GST and deferred tax; and

The treatment of non-operating items.

This has resulted in a company having more than one possible value-added figure and that the allocation of value-added between the various stakeholders can be presented in different ways.
FORMAT OF VALUE ADDED STATEMENT

ABC Company Ltd.

Value-Added Statement (Report or Vertical Form)

for the year ended 31st March .................

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Generation of Value-Added:</strong></td>
<td></td>
</tr>
<tr>
<td>Sales/Turnover (Including excise duties and sales tax excluding</td>
<td></td>
</tr>
<tr>
<td>Returns, rebates &amp; discounts, etc.)</td>
<td>xxx</td>
</tr>
<tr>
<td>± Stock of semi-finished and finished goods</td>
<td>xxx</td>
</tr>
<tr>
<td>Production value</td>
<td>xxx</td>
</tr>
<tr>
<td>Add: Income from services</td>
<td>xxx</td>
</tr>
<tr>
<td>Less : Bought-in-goods and services purchased from outsiders</td>
<td>xxx</td>
</tr>
<tr>
<td>Gross Value-Added (GVA)</td>
<td>xxx</td>
</tr>
<tr>
<td>Less : Depreciation and deferred Revenue expenses</td>
<td>xxx</td>
</tr>
<tr>
<td>Net Value-Added (NVA)</td>
<td>xxx</td>
</tr>
<tr>
<td><strong>B. Application of Value-Added:</strong></td>
<td></td>
</tr>
<tr>
<td>Receipt by Workers/Employees</td>
<td>xxx</td>
</tr>
<tr>
<td>Receipt by Providers of Loan Capital</td>
<td>xxx</td>
</tr>
<tr>
<td>Receipt by Government</td>
<td>xxx</td>
</tr>
<tr>
<td>Receipt by Owners</td>
<td>xxx</td>
</tr>
<tr>
<td>Net Value-Added (NVA)</td>
<td>xxx</td>
</tr>
</tbody>
</table>

**Extracts of Value-Added Statement Infosys Annual Report 2011-12**

<table>
<thead>
<tr>
<th>VALUE ADDED STATEMENT</th>
<th>2012</th>
<th>% of VA</th>
<th>2011</th>
<th>% of VA</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>33,734</td>
<td>27,501</td>
<td>22.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less : Operating expenses excluding personnel costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software development and business process management expenses</td>
<td>2,634</td>
<td>2,083</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling and marketing expenses</td>
<td>397</td>
<td>294</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General and administration expenses</td>
<td>1,647</td>
<td>1,304</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value-Added from operations</td>
<td>29,056</td>
<td>23,820</td>
<td>22.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other income (including exceptional items)</td>
<td>1,904</td>
<td>1,211</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Corporate Financial Reporting

#### Lesson 8

<table>
<thead>
<tr>
<th>Total Value-Added</th>
<th>30,960</th>
<th>25,031</th>
<th>23.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution of Value-Added</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Human resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and bonus</td>
<td>18,340</td>
<td>59.2</td>
<td>14,856</td>
</tr>
<tr>
<td>– Providers of capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend(1)</td>
<td>2,699</td>
<td>8.7</td>
<td>3,445</td>
</tr>
<tr>
<td>Minority interest</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Interest on debt</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Taxes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate income taxes</td>
<td>3,367</td>
<td>10.9</td>
<td>2,490</td>
</tr>
<tr>
<td>Dividend tax(1)</td>
<td>438</td>
<td>1.4</td>
<td>568</td>
</tr>
<tr>
<td>Income retained in business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>937</td>
<td>3.0</td>
<td>862</td>
</tr>
<tr>
<td>Retained in business</td>
<td>5,179</td>
<td>16.8</td>
<td>2,810</td>
</tr>
<tr>
<td>Total</td>
<td>30,960</td>
<td>100.0</td>
<td>25,031</td>
</tr>
</tbody>
</table>

**Note:** The figures above are based on IFRS financial statements and they were considered on accrual basis.

### Extracts of Value Added Statement of Bharat Petroleum Corporation Limited 2010-2011

#### Rs. in Crores

<table>
<thead>
<tr>
<th>HOW VALUE IS GENERATED</th>
<th>2010-11</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of Production (Refinery)</td>
<td>71,660</td>
<td>55,153</td>
</tr>
<tr>
<td>Less : Direct Materials Consumed</td>
<td>(63,304)</td>
<td>(50,825)</td>
</tr>
<tr>
<td>Added Value</td>
<td>8,356</td>
<td>4,328</td>
</tr>
<tr>
<td>Marketing Operations</td>
<td>3,180</td>
<td>5,453</td>
</tr>
<tr>
<td>Value added by Manufacturing &amp; Trading Operations</td>
<td>11,536</td>
<td>9,781</td>
</tr>
<tr>
<td>Add : Other Income and prior period items</td>
<td>1,745</td>
<td>2,185</td>
</tr>
<tr>
<td>Total Value Generated</td>
<td>13,281</td>
<td>11,966</td>
</tr>
</tbody>
</table>

#### Rs. in Crores

<table>
<thead>
<tr>
<th>HOW VALUE IS DISTRIBUTED</th>
<th>2010-11</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations &amp; Service Costs</td>
<td>5,162</td>
<td>5,509</td>
</tr>
<tr>
<td>Employees’ Benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries, Wages &amp; Bonus</td>
<td>1,507</td>
<td>1,606</td>
</tr>
</tbody>
</table>
Other Benefits | 1,296 | 535
---|---|---
Providers of Capital | | |
Interest on Borrowings | 1,101 | 1,011
Dividend | 577 | 579
Income Tax | 866 | 828
Re-Investment in Business | | |
Depreciation | 1,655 | 1,242
Deferred Tax | 148 | (303)
Retained Profit | 969 | 959
Total Value distributed | 3,281 | 11,966

**ECONOMIC VALUE ADDED**

A critical concept in evaluating the performance of any business is termed as economic value-added. In generic terms, value-added refers to the additional or incremental value created by an activity or a business venture. Economic value-added is a refinement of this concept—it measures the economic rather than accounting profit created by a business after the cost of all resources including both debt and equity capital have been taken into account.

Economic Value-Added (EVA) is a financial measure what economists sometimes refer to as economic profit or economic rent. The difference between economic profit and accounting profit is essentially the cost of equity capital—an accountant does not subtract a cost of equity capital in the computation of profit, so in fact an accountant's measure of income or profit is in essence the residual return to that equity capital since all other costs have been deducted from the revenue stream. In contrast, an economist charges for all resources in his computation of profit—including an opportunity cost for the equity capital invested in the business—so an economist's definition and computation of the profit is net above the cost of all resources.

**How to Calculate Economic Value-Added (EVA)**

Note that, as in the traditional computation of earnings, interest on debt capital is subtracted from operating earnings (earnings before interest and taxes (EBIT)) to obtain net income. Then, an opportunity cost on equity capital is subtracted to obtain EVA. The opportunity cost on equity capital is computed as the equity or net worth of the business times a rate of return that reflects the rate required by investors in the business. This required rate is in reality an opportunity cost measured by the rate of return that could be obtained on equity funds, if they were invested elsewhere. A positive EVA means the firm is generating a return to invest capital that exceeds the direct, i.e., interest and opportunity cost of that invested capital; a negative EVA means that the firm did not generate a sufficient return to cover the cost of its debt and equity capital.

The followed tables gives a view how to calculate Economic Value-Added (EVA).

Earnings before Interest and Taxes (EBIT) | xxx
---|---
Less : Interest | xxx
Net Income | xxx
Less : Cost of Equity Capital | xxx
Economic Value-Added (EVA) | xxx

**Expressed as a formula:**

EVA = “Net Operating Profit after Taxes” – (Equity Capital X % Cost of Equity Capital). Illustration
Balance Sheet of ABC Limited
as on 31st March, 2012

I. EQUITY AND LIABILITIES

1. Shareholders’ Funds

Equity

2. Non-Current Liabilities

Long-Term Debt

3. Current Liabilities

(a) Account Payables

(b) Bank Overdrafts

TOTAL

ASSETS

1. Non-Current Assets

(a) Fixed Assets

2. Current Assets

(a) Inventories

(ii) Finished Goods

(b) Account Receivable

(c) Cash

TOTAL

Statement of Profit of
ABC Limited

Sales
Less: Operating Expenses
EBIT
Less: Tax Expenses
NOPAT

The average rate of return on similar types of companies is 20%, while risk-free return is 12.5%. Rate of return as charged by bank is 18%, and the tax rate is 40%.

Calculate Economic Value-Added.

Solution

Step 1: Calculation of Capital Employed

Equity

Long-Term Debt
Step 2: Calculation of Weighted Average Cost of Capital (WACC)

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>Expected Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>400000</td>
<td>80000</td>
</tr>
<tr>
<td>Long-Term Debt</td>
<td>600000</td>
<td>45000</td>
</tr>
<tr>
<td>Bank Overdrafts</td>
<td>48400</td>
<td>5227.2</td>
</tr>
<tr>
<td>Total Capital Employed</td>
<td>1048400</td>
<td>130227.2</td>
</tr>
</tbody>
</table>

\[
\text{WACC} = \frac{130227.2}{1048400} = 12.42\%
\]

Step 3:

Economic Value-Added = NOPAT - Weighted average cost of capital\* Capital Employed

Rs.102816-Rs.130227.2

Rs.27411.2

What insight does EVA provide about financial performance of a business?

First, like any financial measure, the trend may be more valuable than the absolute value of EVA. Even if EVA is positive, a declining EVA suggests that financial performance is deteriorating over time, and if this trend continues EVA will become negative and financial performance unacceptable. A negative EVA indicates that the firm is not compensating its capital resources adequately, and corrective action should be considered if this negative EVA persists over time.

Corrective Action to Improve EVA

First, operating performance with respect to operating profit margins or asset turnover ratios could be improved to generate more revenue without using more capital.

Second, the capital invested in the business might be reduced by selling under-utilized assets. This strategy will simultaneously improve operating performance through a higher asset turnover ratio, as well as a reduced capital charge against those earnings because of a reduced debt or equity capital investment.

Third, redeploy the capital invested to projects and activities that have higher operating performance than the current projects or investments are exhibiting.

And fourth, if the business is not highly leveraged, change the capital structure by substituting lower cost debt for higher cost equity. Although this last strategy will decrease net income because of the higher interest cost, it will improve the EVA of the business because the total cost of debt and equity is reduced, and EVA measures the value created after all costs of capital (debt and equity) have been taken into account.

Advantages of EVA Analysis

In various cases, company pays bonuses to the employees on the basis of EVA generated. Since a higher EVA implies higher bonuses to the employees, it motivates the employees to work hard and generate higher revenue.

Using EVA, company can evaluate the projects independently, and hence can decide whether to execute the project or not.

It helps the company in monitoring the problem areas and taking corrective actions to resolve those problems.
Unlike accounting profit, such as EBIT, Net Income and EPS, EVA is based on the idea that a business must cover both the operating costs as well as the capital costs and hence it presents a better and true picture of the company to the owners, creditors, employees, shareholders and all other interested parties.

It also helps the owners of the company to identify the best person to run the company effectively and efficiently. However, there are some disadvantages of EVA like it is difficult to compute, and also it does not take into account inflation into its calculation. Therefore, company should take into account above advantages and disadvantages before deciding whether to implement EVA or not.

**MARKET VALUE ADDED**

Value based management and shareholder-value analysis is a well known concept since with the change of time newer related concepts such as MVA have gained importance.

Market value-added is the difference between the company’s market and book value of shares. According to Stern Stewart, if the total market value of a company is more than the amount of capital invested in it, the company has managed to create shareholder value. If the market value is less than capital invested, the company has destroyed shareholder value.

\[
\text{Market Value-Added} = \text{Company’s total Market Value} - \text{Capital Invested}
\]

With the simplifying assumption that market and book value of debt are equal, this is the same as \( \text{Market Value-Added} = \text{Market Value of equity} - \text{Book value of equity} \).

Book value of equity refers to all equity equivalent items like reserves, retained earnings and provisions. In other words, in this context, all the items that are not debt (interest bearing or non-interest bearing) are classified as equity.

Market value-added (MVATM) is identical in meaning with the market-to-book ratio. The difference is only that MVA is an absolute measure and market-to-book ratio is a relative measure. If MVA is positive, it means that market–to–book ratio is less than one. According to Stewart's Market value-added tells us how much value the company has added to, or subtracted from, its shareholders investment. Successful companies add their MVA and thus increase the value of capital invested in the company. In unsuccessful companies decrease the value of the capital originally invested decreases.

Whether a company succeeds in creating MVA or not depends on its rate of return. If a company’s rate of return exceeds its cost of capital, the company will sell on the stock market with premium compared to the original capital. On the other hand, companies that have rate of return smaller than their cost of capital sell with discount compared to the original capital invested in company. Whether a company has positive or negative MVA depends on the rate of return compared to the cost of capital.

Market value-added can also be defined in relation to Economic Value-Added Measures (EVATM). EVA measures whether the operating profit is enough compared to the total cost of capital employed. Stewart defines EVA as the surplus of Net Operating Profit after Taxes (NOPAT) and after adjusting capital cost, where \( \text{NOPAT} = \text{Profit after depreciation and taxes but before interest costs} \) and \( \text{Capital Cost} = \text{Weighted average cost of capital} \times \text{capital employed} \) or \( \text{EVA} = (\text{ROI} - \text{WACC}) \times \text{Capital employed} \).

He further defines the connection between EVA and MVA as: Market Value-Added = Present Value of All future EVA by increasing EVA, i.e., a company increases its market value-added or in other words increases the difference between company’s value and the amount of capital invested in it.

The relationship of MVA with EVA has its implication on valuation. By rearranging the formula, market value of equity can be defined as:

\[
\text{Market value of equity} = \text{Book value of equity} + \text{Present value of all future EVA}.
\]
SHAREHOLDER VALUE ADDED (SVA)

Shareholder Value-Added (SVA) represents the economic profits generated by a business above and beyond the minimum return required by all providers of capital. “Value” is added when the overall net economic cash flow of the business exceeds the economic cost of all the capital employed to produce the operating profit. Therefore, SVA integrates financial statements of the business (profit and loss, balance sheet and cash flow) into one meaningful measure.

The SVA approach is a methodology which recognizes that equity holders as well as debt financiers need to be compensated for bearing investment risk. The SVA methodology is a highly flexible approach to assist management in the decision-making process. Its applications include performance monitoring, capital budgeting, output pricing and market valuation of the entity.

ADVANTAGES OF ADOPTING SVA

To create value, management must have an understanding of the variables that drive the value of the business. An organization cannot act directly on value. It has to act on factors it can influence, such as client satisfaction, cost, capital expenditures, the debt / equity mix and so forth. Through an understanding of these drivers of value, management is able to establish a consistent dialogue, both internally and with the shareholders, regarding what needs to be accomplished to create value. The benefits of moving towards SVA include:

Overall, the value-based performance measures will result in greater accountability for the investment of new capital, as well as for the use of existing investments.

Organization will have the opportunity to apply a meaningful private sector benchmark to evaluate performance.

Managers will be provided with an improved focus on maximizing shareholder value.

Limitations of Adopting SVA

A limitation in the use of SVA as a performance measure is that, by nature, it is an aggregate measure. In order to analyse the underlying causes of any changes in calculated value between years, it is necessary to fully comprehend the value drivers and activities specific to a given firm.

There may be certain enterprises which are subject to any degree of price regulation. Hence, then it may not be possible for management to adjust output prices to achieve a commercial return in response to upward movements in input prices. Such a situation may result in SVA getting reduced even though there may have been no decrease in overall efficiency.

Similarly, a reduction in direct Government funding would result in a decrease in SVA.

Combined with the use of traditional accounting measures, a thorough knowledge of the value drivers of the business will assist in determining the underlying causes of fluctuations in the value-added measure.

Again, the use of SVA is not substitute for detailed analysis of business drivers, rather it is an additional measurement tool with an economic foundation.

LESSON ROUND UP

- Financial reporting includes not only financial statements but also other means of communicating information that relate to the information provided by the accounting system.
- The end product of accounting process should be such that it generates:
  - information useful in investment and credit decisions,
  - information useful in assessing cash flow prospects (amount, timing, and uncertainty), and
information about enterprise resources, claims to those resources and changes therein.

The Value-Added Statement (VAS) is a voluntary disclosure and adds little information to that contained in the income statement. It calculates total output by adding sales, changes in stock, and other incomes, then subtracting depreciation, interest, taxation, dividends, and the amounts paid to suppliers and employees.

Economic value-added (EVA) measures the economic rather than accounting profit created by a business after the cost of all resources including both debt and equity capital have been taken into account.

EVA = “Net Operating Profit after Taxes” – (Equity Capital X % Cost of Equity Capital)

Market value-added (MVA) is the difference between the Company’s market and book value of shares.

Market Value-Added = Company’s total Market Value – Capital Invested

Shareholder Value-Added (SVA) represents the economic profits generated by a business above and beyond the minimum return required by all providers of capital.

SELF-TEST QUESTIONS

1. Discuss the concept of Corporate Financial Reporting and its requirements in India.
2. What are the objectives of corporate financial reporting?
3. What is Value-added Statement (VAS)? State the merit and demerit of VAS.
4. What do you mean by Economic Value-added? How is EVA related to valuation?
5. Discuss the Shareholder Value-Added (SVA), its benefits and drawbacks.
6. Write Short Notes on:
   (a) Market Value of Equity
   (b) Limitations of Value-Added Statement
      1. What are the contents Corporate Governance report?
      2. What is CARO? Explain in Detail.
Lesson 9
Cash Flow Statement

LESSON OUTLINE

– Introduction to Cash Flow Statement
– Funds Flow Statement Vs Cash Flow Statement
– Types of Cash Flows in CFS
– Adjustments in Cash Flow Statement
– Utility & Limitations of CFS
– Preparation of Cash Flow Statement
– Different Methods applied in Cash Flow Statement
– LESSON ROUND UP
– SELF TEST QUESTIONS

LEARNING OBJECTIVES

Companies are evaluated on the basis of their financial performance. But the liquidity of a company is also important. To know the cash generated from different activities, like investing, financing and operating activities cash flow statement is prepared. It also used as one of the financial analysis tools. In this chapter we will study how to prepare Cash Flow Statement and what is the application CFS.

– Understand the meaning of cash flow statement
– Distinguish between funds flow statement and cash flow statement
– Understand the concept of funds in cash flow analysis
– Explain the utility and limitations of cash flow analysis
– Understand the effect of Accounting Standard (AS-3) on cash flow statement
– Describe the operating activities, investing activities and financing activities
– Identify the transactions effecting inflow and outflow of cash
– Understand the method of preparation of cash flow statement;
– Explain the objectives and uses of cash flow statement
INTRODUCTION TO CASH FLOW STATEMENT (CFS)

A statement of changes in the financial position of a company can be found out in two ways:

(a) Working Capital Basis, i.e., Funds Flow Statement, and
(b) Cash Basis, i.e., Cash Flow Statement

A Cash Flow Statement is statement of changes in cash position between the beginning and end of the financial period. It is a statement which summarizes the sources of cash from which cash payments shade during a particular period of time, say a month or a year. In other words, a cash flow statement shows the various sources of cash inflow and uses of cash outflow during a period thus beginning the changes in cash position of the business.

A cash flow statement is not very much different from a funds flow statement. In fact, the main difference between the funds flow statement and cash flow statement relates to the meaning and concept of the term ‘fund’. The term ‘fund’ as used in funds flow statement means net working capital, i.e., the insurance between the current assets and current liabilities. But in a cash flow statement the term means cash fund as defined by Accounting Standard-3.

DISTINCTION BETWEEN FUNDS FLOW STATEMENT AND CASH FLOW STATEMENT

The main points of distinction between the two statements are as follows:

1. **Cash position and working capital position.** A cash flow statement is mainly dealt with changes in cash position, while a funds flow statement is concerned with changed working capital. It should be understood that working capital is a wide term and includes cash besides other current assets like debtors, bills receivable, stock, etc. Thus, cash is only one of the constituents of the working capital.

2. **Usefulness in short-term financial analysis.** For short-term financial analysis the cash flow statement is considered to be more useful to management as compared to funds flow statement. For example, if it is to be found whether a company will be able to meet its obligations maturing within one month, the cash flow analysis will prove better than funds flow analysis.

3. **Method of preparation.** Techniques of preparing the cash flow statement and funds flow statement are different. In funds flow statement, an increase in a current liability brings a decrease in the current asset resulting in decrease in net working capital and vice-versa. In a cash flow statement an increase in a current liability or decrease in a asset (other than cash) might result in an increase in cash and vice versa.

4. **The funds flow statement** generally gives a picture of changes in the working capital in future; whereas; the funds flow statement does not give and such statement.

5. **Opening and closing balances.** In the cash flow statement opening and closing balance (cash and equivalents) is given. But a funds flow statement does not contain in opening and closing balances.

6. **Legal requirement.** There is no legal requirement to prepare funds flow statement but cash flow statement is to be prepared by every listed company as per the requirement of SEBI.
**Sources of Cash**

<table>
<thead>
<tr>
<th>Internal Sources</th>
<th>External Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation</td>
<td>Raising Long-term Loans</td>
</tr>
<tr>
<td>Amortization of intangible</td>
<td>Purchase of Plant and Machinery on deferred payments</td>
</tr>
<tr>
<td>Loss on sale of fixed assets</td>
<td>Sale of Fixed Assets, Investments</td>
</tr>
<tr>
<td>Creation of reserves</td>
<td></td>
</tr>
<tr>
<td>Issue of New Shares</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Internal Sources**

Cash from operations is the main internal source. The net profit shown by the Profit and Loss Account will have to be adjusted for non-cash items for finding out cash from operations. Some of these items are as follows:

i. **Depreciation**: Depreciation does not result in an outflow of cash. Therefore net profit will have to be increased by finding out the amount of depreciation or development rebate charged, in order to find out the real cash generated from operations.

ii. **Amortization of intangible assets**: Goodwill, preliminary expenses, etc. when written off against profits, reduce the net profits without affecting the cash balance. The amounts written off should, therefore, be added back to profits to find out the generation of each from operations.

iii. **Loss on sale of fixed assets**: It does not result in an outflow of cash, therefore should be added back to profits.

iv. **Gain from sale of fixed assets**: Since sale of fixed assets is taken as a separate source of cash, it should be deducted from the net profits.

v. **Creation of reserves**: If profit for the year has been arrived at after charging transfers to reserves. Such transfers should be added back to profits. The cash operations show a net loss, such net loss after making adjustments for non-cash items can be shown as an application of cash.

**External Sources**

The external sources of cash are:

i. **Issue of New Shares**: In case shares have been issued for cash, the net cash received (i.e., after deducting expenses on the issue of shares or discount on the issue of shares) will be taken as a source of cash.

ii. **Raising Long-term Loans**: Long-term loans, such as issue of debentures, loans from Industrial Finance Corporations, State Financial Corporation and IDBI are sources of cash. They should be shown separately.

iii. **Purchase of Plant and Machinery on deferred payments**: In case plant and machinery have been purchased on a deferred payment system, it should be shown as a separate source of cash.

iv. **Short-term Borrowings-cash credit from banks**: Short-term borrowings, etc., from banks increase available cash but they have to be shown separately under the above head.
v. **Sale of Fixed Assets, Investments, etc.:** It results in the generation of cash and therefore, is a source of cash.

Decrease in various current assets and increase in various current liabilities (as discussed further) may be taken as external sources of cash, if they are not adjusted while computing cash from operations.

### Cash Fund – Understanding

As per Accounting Standard -3 (AS-3) issued by the Institute of Chartered Accountants of India, the term cash includes:

1. Cash in hand;
2. Demand deposits with bank; and
3. Cash equivalents. These are short-term highly liquid investments that are readily convertible into known amounts of cash, and which are subject to an insignificant risk of changes in value.

### Meaning of Cash Inflow and Outflow

Cash flow includes inflow and outflow of cash. An inflow, i.e., source of cash increases the total cash available at the disposal of the firm, while an outflow, i.e., use of cash decreases it. The difference between cash inflows, and cash outflow is known as net cash flow which can be either net cash flow or net cash outflow.

It should be noted that cash flow statement deals with the flow of cash fund, but it does not consider investment inter se cash bank balance and cash equivalents. This is in line with funds flow statement which excludes movement between items that constitute working capital, i.e., current assets and current liabilities.

### TYPES OF CASH FLOWS IN CFS

Accounting Standard (AS-3) requires that cash flow statement should report cash flow during the period classified by operating, investing and financing activities.

1. **OPERATING ACTIVITIES:** Operating activities are the principal revenue activities of the enterprises. Cash flows from these activities resulting from transactions and other events that enter into the examination of net permit or loss. Examples of cash flow from operations are:

   **CASH INFLOWS**
   1. Cash sales and cash received from debtors.
   2. Cash received from royalty, fees, commission, etc.
   3. In case of finance companies, cash received from sale of securities, interest and dividend receipts.

   **CASH OUTFLOWS**
   1. Cash purchases and payment to creditors.
   2. Payment of wages, salaries, rent, insurance, etc.
   3. Payment of taxes.
   4. In case of finance companies, cash payment of interest and purchase of securities.

2. **INVESTING ACTIVITIES** : These are the acquisitions and disposal of long-term assets (such as plant, machinery, furniture, land and building etc.) and other investments are not included in cash equivalents. Examples of cash flow arising from investing activities are:

   **CASH INFLOWS**
   (i) Sale of fixed assets
(ii) Sale of investments such as shares, and debentures
(iii) Receipts of interest and dividends
(iv) Receipts from repayment of loans made to third parties

CASH OUTFLOWS
(i) Purchase of fixed assets
(ii) Purchases of shares, debentures, etc., as investments

3. FINANCING ACTIVITIES: These are the activities that result in changes in the size and composition of the owner’s capital and borrowings of the enterprise. Examples of cash flows arising from financing activities are.

CASH INFLOWS
(i) Cash receipts from the issue of shares, debentures, etc.
(ii) Cash receipts from loans raised

CASH OUTFLOWS
(i) Cash payments for the redemption of preference shares and debentures.
(ii) Buy-back of equity shares.
(iii) Payment of interest and dividends.

POINTS TO REMEMBER:
1. Order followed for presenting the cash flow is to first show operating activities, followed by investing activities, and then financing activities.
2. The net cash flow from an activity – operating, investing and financing can be positive or negative. Positive cash flow means net inflow, i.e., receipts exceed payments. Negatives cash flow means net outflow, i.e., payments exceed receipts.
3. Any inflow or outflow between cash, bank and cash equivalents is not taken as cash flow. For example, cash deposited in bank is not a cash flow.
4. The sum of net inflows or outflows of all the activities represents an increase or decrease in cash flows, which is reconciled with opening and closing balance of cash.

Right Thing at Right Place

1. INTEREST AND DIVIDENDS:
   (i) In case of a financing enterprise, cash flows from interest and dividend received should be treated as cash flows from operating activities. Dividends paid should be classified as cash flows from financing activities.
   (ii) In the case of other enterprises, cash flows arising from interest and dividend paid should be classified as cash flows from financing activities while interest and dividend received should be classified as cash flows from investing activities.

Net profit is adjusted for non-operating expenses and incomes for calculating operating profits are shown below:

   Net profit
Add: Non-operating expenses
Less: Non-operating incomes
Net operating profit
2. INCOME TAX: Cash flows arising from income tax should be classified as flows from operating activities unless they can be specifically identified with financing and investing activities. The cash flow statement, should be shown as outflow from investing activities.

3. EXTRA ORDINARY ITEMS: The cash flows associated with extraordinary items should be classified as arising from operating, investing or financing activities as appropriate and separately disclosed. For example, legal claim, cost of winning a law suit or lottery, receipt of claim from an insurance company, etc., are extra ordinary items.

4. NON CASH TRANSACTIONS: There are certain transactions which do not involve cash inflow in cash outflow. Although they do affect the capital and assets of an enterprise, they are excluded from cash flow statement for obvious reasons. Examples of non-cash transactions are:

   (i) Acquisition of assets by issue of shares/debentures
   (ii) Conversion of convertible debentures into shares
   (iii) Acquisition of a fixed asset, say machinery, on credit, etc.

**Difference between Cash Flow Analysis and Funds Flow Analysis**

Following are the points of difference between a cash flow analysis and a funds flow analysis:

1. A cash flow analysis is concerned only with the change in the cash position, while a fund flow analysis is concerned with change in working capital position, between two balance sheet dates. Cash is only one of the constituents of working capital besides several other constituents, such as inventories, accounts receivable and prepaid expenses.

2. A cash flow statement is merely a record of cash receipts and disbursements. No doubt it is valuable in its own way but it fails to bring to light many important changes involving the disposition of resources. While studying the short-term solvency of a business one is interested not only in cash balance but also in the assets which can be easily converted into cash.

3. Cash flow analysis is more useful to the management as a tool of financial analysis in short-periods as compared to funds flow analysis. It has rightly been said that shorter the period covered by the analysis, greater is the importance of cash flow analysis. For example, if one can find out whether the business can meet its obligations maturing after 10 years from now, a good estimate can be made about the firm’s capacity to meet its long-term obligations, if changes in working capital position on account of operations are observed. However, if the firm’s capacity to meet a liability, maturing after one month, is to be seen, the realistic approach would be to consider the projected change in the cash position rather than an expected change in the working capital position.

4. Cash is part of working capital and therefore, an improvement in cash position results in an improvement in the funds position, but the reverse is not true. In other words ‘inflow of cash’ results in ‘inflow of funds’ but inflow of funds may not necessarily result in ‘inflow of cash.’ Thus, sound funds position does not necessarily mean sound cash position, but a sound cash position generally means a sound funds position.

5. Another distinction between a cash flow analysis and a funds flow analysis can be made on the basis of the techniques of their preparation. An increase in a current liability or decrease in a current asset results in a decrease in working capital and vice versa; while an increase in a current liability or decrease in a current asset (other than cash) will result in an increase in cash and vice versa.
UTILITY OF CASH FLOW ANALYSIS

A cash flow statement is useful for short-term planning. A business enterprise needs sufficient cash to meet its various obligations in the near future such as payment for purchase of fixed assets, payment of debts maturing in the near future, expenses of the business, etc. A historical analysis of the different sources and applications of cash will enable the management to make a reliable cash flow projections for the immediate future. It may then plan out for investment of surplus to meet the deficit, if any. Thus, a cash flow analysis is an important financial tool for the management. Its chief advantages are as follows:

1. **Helps in efficient cash management**: Cash flow analysis helps in evaluating financial policies and cash position. Cash is the basis for all operations; hence a projected cash flow statement will enable the management to plan and coordinate the financial operations properly. The management can know how much cash is needed, from which source it will be derived, how much can be generated internally and how much could be obtained from outside.

2. **Helps in internal financial management**: Cash flow analysis provides information about funds which will be available from operations. This will help the management in determining policies regarding internal financial management, e.g., possibility of repayment of long-term debts, dividend policies and planning the replacement of plant and machinery.

3. **Discloses the movements of cash**: Cash flow statement discloses the complete story of cash movement. The increase or decrease in cash, and the reasons therefore can be known. It discloses the reasons for low cash balance in spite of heavy operating profits or for heavy cash balance in spite of low profits. However, comparison of original forecast with the actual results highlights the trends of movements of cash which may otherwise go undetected.

4. **Discloses success or failure of cash planning**: The extent of success or failure of cash planning can be known by comparing the projected cash flow statement with the actual cash flow statement so that necessary remedial measures can be taken.

LIMITATIONS OF CASH FLOW ANALYSIS

Cash flow analysis is a useful tool of financial analysis. However, it has its own limitations. These limitations are as under:

1. Cash flow statement cannot be equated with the income statement. An income statement takes into account both cash as well as non-cash items; therefore, net cash does not necessarily mean net income of the business.

2. The cash balance as disclosed by the cash flow statement may not represent the real liquid position of the business since it can be easily influenced by postponing purchases and other payments.

3. Cash flow statement cannot replace the income statement or the funds flow statement. Each of them has a separate function to perform.

In spite of these limitations it can be said that cash flow statement is a useful supplementary instrument. It discloses the volume as well as the speed at which the cash flows in the different segments of the business. This helps the management in knowing the amount of capital tied up in a particular segment of the business. The technique of cash flow analysis, when used in conjunction with ratio analysis, serves as a barometer in measuring the profitability and financial position of the business.

PREPARATION OF CASH FLOW STATEMENT

Preparation of cash flow statement is similar to that of funds flow statement. Infact, the difference arises from
the definition of funds. In funds flow statement, fund means net working capital while in cash flow statement it means ‘cash’. AS-3 has not prescribed any specific formed cash flow statement, but SEBI has approved the cash flow statement to be prepared in the following form:

**Methods of Cash Flow Statement**

- **Direct Method**: Cash receipts from operating revenues and cash payments for operating expenses are calculated and shown in the cash flow statement.
- **Indirect Method**: Operating activities is determined by making necessary adjustments in the net profit (or loss) as disclosed by profit and loss account.

### Calculation of Cash Flows from Operations or Operating Activities

There are two methods of calculating cash flows from operating activities:

(a) **Direct Method**, and (b) **Indirect Method**

**Direct Method**: Under this method, cash receipts from operating revenues and cash payments for operating expenses are calculated and shown in the cash flow statement. The difference between the total cash receipts and total cash payment are shown as the net cash flow from operating activities. Examples of usual cash receipts and payments resulting from operating activities are:

1. **Cash sales of goods and services**
2. **Cash received from debtors**
3. **Cash payment for purchase of inventories**
4. **Cash payment to creditors**
5. **Cash payment for wages, salaries and other operating expenses**
6. **Cash payment of income tax, etc.**

There are many items which appear in the Profit and Loss Account on accrual basis. Necessary adjustments are made to these items to convert them into cash based items.

**Note**: Direct method of determining cash flows from operating activities has not been used in this book to solve practical problems. The indirect method is more popular in actual practice and has been used in this book in practical problems.

**Indirect Method**: Under the indirect method, the net cash from operating activities is determined by making necessary adjustments in the net profit (or loss) as disclosed by Profit and Loss Account. Adjustments in net profit or loss occur because of the following:

1. **Non-cash items like depreciation**;
2. **Changes during the period in inventories and operating receivables and payables**;
(c) All other items for which cash effects are investing and financing cash flows.

The indirect method is also known as ‘Reconciliation Method’ as it involves a reconciliation of the net profit with net cash flows from operating activities.

The method of calculating cash from operating activities is as follows:

**Net Profit for the Year**

Add : Non-cash and non-operating expenses:
- Depreciation
- Goodwill written off
- Preliminary Expenses written off
- Share discount written off
- Loss on sale of fixed assets, investments, etc.
- Provision for taxation

Less : Non-cash and non-operating incomes:
Profit on sale on fixed assets, investments, etc.

Net profit after adjustment for non-cash items

Adjustments for changes in current operating assets (except cash and cash equivalents) and current operating liabilities (except bank overdraft)

Add : 1. Increase in current liabilities
2. Decrease in current assets

Less : 1. Increase in current asset
2. Decrease in current liability

Less : 1. Income tax paid

Cash from Operating Activities

**Illustration 1.**

From the following balances calculate cash from operations:

<table>
<thead>
<tr>
<th></th>
<th>31st December</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>Bills receivable</td>
<td>5,000</td>
</tr>
<tr>
<td>Debtors</td>
<td>1,000</td>
</tr>
<tr>
<td>Bills payable</td>
<td>2,000</td>
</tr>
<tr>
<td>Creditors</td>
<td>800</td>
</tr>
<tr>
<td>Outstanding Expenses</td>
<td>100</td>
</tr>
<tr>
<td>Prepaid Expenses</td>
<td>80</td>
</tr>
</tbody>
</table>
Calculation of cash from Operating Activities

**Profit made during the year** 7,000

Add : Decrease in current assets and increases in current liabilities :
- Decrease in bills receivable (C.A.) 300
- Increase in bills payable (C.L.) 500
- Increase in outstanding expenses (C.L.) 20
- Decrease in prepaid expenses (C.A.) 10

Less : Increase in current assets and decrease in current liabilities :
- Increase in debtors (C.A.) 250
- Decrease in creditors (C.L.) 200
- Increase in accrued income (C.A.) 15
- Decrease in income received in advance (C.L.) 55

Cash from Operating Activities 7,310

[C.A. = Current Asset, C.L. = Current Liability]

Calculation of Cash Flows from Investing Activities

Cash inflows and outflows from investing activities result from acquisition and disposal of long-term assets, non-operating current assets and investments. The net effect of cash inflows and outflows is determined and shown as cash flows from investing activities in the cash flow statement.

These activities relate to the issue of shares and debentures, redemption of preference shares and debentures, raising of loans and repayment of loans, etc., the net effect of inflows and outflows of cash relating of these financing activities is determined and shown in the cash flow statement under this head of cash flow from financing activities.
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Analysis of Balance Sheet Accounts

1. Assets = Liabilities + Stockholders’ Equity
2. Cash + Noncash Assets = Liabilities + Stockholders’ Equity
3. Change in Cash + Changes in Noncash Assets = Changes in Liabilities + Changes in Stockholders’ Equity

SOURCES AND USES OF CASH

<table>
<thead>
<tr>
<th>Sources</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>Always</td>
</tr>
<tr>
<td>Net loss</td>
<td>Always</td>
</tr>
<tr>
<td>Changes in noncash assets</td>
<td>Decreases</td>
</tr>
<tr>
<td>Increases</td>
<td>Increases</td>
</tr>
<tr>
<td>Changes in liabilities*</td>
<td>Increases</td>
</tr>
<tr>
<td>Decreases</td>
<td>Decreases</td>
</tr>
<tr>
<td>Changes in capital stock accounts</td>
<td>Increases</td>
</tr>
<tr>
<td>Dividends paid to stockholders</td>
<td>Always</td>
</tr>
</tbody>
</table>

Total sources – Total uses = Net cash flow

*Contra asset accounts, such as the Accumulated Depreciation and Amortization account, follow the rules for liabilities.

Illustration 2.

Prepare a Cash Flow Statement on the basis of the information given in the Balance Sheets of Y.S. Ltd.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital</td>
<td>20,000</td>
<td>25,000</td>
<td>Goodwill</td>
<td>1,000</td>
<td>200</td>
</tr>
<tr>
<td>12% Debenture</td>
<td>10,000</td>
<td>8,000</td>
<td>Land and Building</td>
<td>20,000</td>
<td>28,000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>5,000</td>
<td>7,000</td>
<td>Machinery</td>
<td>10,000</td>
<td>13,000</td>
</tr>
<tr>
<td>Creditors</td>
<td>4,000</td>
<td>6,000</td>
<td>Debtors</td>
<td>4,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Bills Payable</td>
<td>2,000</td>
<td>10,000</td>
<td>Stock</td>
<td>7,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Outstanding Exp.</td>
<td>2,500</td>
<td>2,000</td>
<td>Cash</td>
<td>1,500</td>
<td>1,800</td>
</tr>
<tr>
<td><strong>43,500</strong></td>
<td><strong>58,000</strong></td>
<td></td>
<td><strong>43,500</strong></td>
<td><strong>58,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
Calculation of Cash from Operations

**Net profit**

**Add:** Non-cash items:
- Depreciation: 200
- Goodwill written off: 400
- Proposed dividend: 500
- Provision for tax: 500
- Loss on sale of plant: 100

\[\text{Net profit} + \text{Non-cash items} = 1,700\]

\[\text{Cash from Operations} = 2,700\]

**Less:** Non-operating incomes:
- Profit on sale of land: 500
- Income tax refund: 300

\[\text{Cash from Operations} = 1,900\]

**Illustration 3.**

Given below are the balance sheets of Veer & Sons.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Creditors</td>
<td>4,000</td>
<td>4,400</td>
<td>Cash</td>
<td>1,000</td>
<td>700</td>
</tr>
<tr>
<td>Mrs. A’s Loan</td>
<td>2,500</td>
<td>--</td>
<td>Debtors</td>
<td>3,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Loans and Bank</td>
<td>4,000</td>
<td>5,000</td>
<td>Stock</td>
<td>3,500</td>
<td>2,500</td>
</tr>
<tr>
<td>Capital</td>
<td>12,500</td>
<td>15,300</td>
<td>Machinery</td>
<td>8,000</td>
<td>5,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Land</td>
<td>4,000</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Building</td>
<td>3,500</td>
<td>6,000</td>
</tr>
<tr>
<td><strong>23,000</strong></td>
<td><strong>24,700</strong></td>
<td></td>
<td><strong>23,000</strong></td>
<td><strong>24,700</strong></td>
<td></td>
</tr>
</tbody>
</table>

During the year a machine costing Rs. 1,000 (accumulated depreciation Rs. 300) is sold for Rs. 500. The provisions for depreciation against machinery as on 01 January 2015 was Rs. 2,500 and on 31 December 2015 Rs. 4,000. Net profit for the year amounts to Rs. 4,500.

You are required to prepare a Cash Flow Statement.

**Solution**

**Cash Flow Statement**

**For the year ending 31-12-2015**

**(i) Cash flow from operating activities**

Profit made during the year
- Add: Depreciation on machinery: 1,800
- Loss on sales of machinery*: 200
- Decrease in stock: 1,000
- Increase in creditors: 400

\[\text{Profit made during the year} = 1,800 + 200 + 1,000 + 400 = 3,400\]

\[\text{Cash from Operations} = 3,400\]

\[\text{Less: Increase in debtors} = (-) 2,000\]

\[\text{Cash from Operations} = 1,400\]
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Cash inflows from operating activities  

Cash flow from investing activities

Sale of machinery*  500
Purchase of land (5,000 – 4,000)  (-) 1000
Purchase of building (6,000 – 3,500)  (-) 2500

Net cash outflow from investing activities

Cash flow from financing activities:

Loan from Bank  1000
Mrs. A’s loan repaid  (-) 2500
Drawings  (-) 1700

Net cash outflow from financial activities  (-) 3200

Net decrease in cash and cash equivalents  (-) 300

Cash and cash equivalents on Jan 1, 2008  1000
Cash and cash equivalents on Dec 31, 2008  700

* Working Notes:

Machinery Account (At Cost)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance b/d</td>
<td>10500</td>
<td>By Bank</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By Loss on sale of Machinery</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By Provision for Depreciation</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By Balance c/d</td>
<td>9500</td>
</tr>
<tr>
<td></td>
<td>10500</td>
<td></td>
<td>10500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Machinery</td>
<td>300</td>
<td>By Balance b/d</td>
<td>2500</td>
</tr>
<tr>
<td>To Balance c/d</td>
<td>4000</td>
<td>By P &amp; L A/c (balancing figure)</td>
<td>1800</td>
</tr>
<tr>
<td></td>
<td>4300</td>
<td></td>
<td>4300</td>
</tr>
</tbody>
</table>

Illustration 4.

Following is the Balance Sheet of ABC Co. Ltd., on 01st January, 2015 and 31st December 2015.

(Amount In Rs.)

<table>
<thead>
<tr>
<th>Liabilities :</th>
<th>01-01-2015</th>
<th>31-12-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity share capital</td>
<td>30,000</td>
<td>35000</td>
</tr>
<tr>
<td>Share premium</td>
<td>--</td>
<td>3000</td>
</tr>
<tr>
<td>General reverse</td>
<td>4500</td>
<td>6500</td>
</tr>
<tr>
<td>Profit and Loss</td>
<td>3000</td>
<td>8080</td>
</tr>
<tr>
<td>6% Debentures</td>
<td>--</td>
<td>7000</td>
</tr>
<tr>
<td>Sundry creditors</td>
<td>8500</td>
<td>9070</td>
</tr>
<tr>
<td>Provision for taxation</td>
<td>2250</td>
<td>4050</td>
</tr>
<tr>
<td>Proposed divided</td>
<td>3000</td>
<td>3500</td>
</tr>
<tr>
<td></td>
<td>51250</td>
<td>76200</td>
</tr>
</tbody>
</table>
### Assets:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amt</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and building</td>
<td>23000</td>
<td>39000</td>
</tr>
<tr>
<td>Plant and machinery</td>
<td>8540</td>
<td>14000</td>
</tr>
<tr>
<td>Furniture</td>
<td>550</td>
<td>650</td>
</tr>
<tr>
<td>Stock</td>
<td>8240</td>
<td>9570</td>
</tr>
<tr>
<td>Sundry debtors</td>
<td>7500</td>
<td>8550</td>
</tr>
<tr>
<td>Bank balance</td>
<td>3420</td>
<td>4430</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51250</strong></td>
<td><strong>76200</strong></td>
</tr>
</tbody>
</table>

### Additional Information:

Depreciation written off during the year:
- Land and building: 6000
- Plant and machinery: 5000
- Furniture: 120

You are required to prepare a cash flow statement.

### Solution:

**Note:** The following accounts have been prepared to determine the relevant information.

#### Land and Building Account

<table>
<thead>
<tr>
<th>Description</th>
<th>Amt</th>
<th>Description</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance b/d</td>
<td>23000</td>
<td>By Depreciation</td>
<td>6000</td>
</tr>
<tr>
<td>To Bank (purchase)</td>
<td>22000</td>
<td>By Balance c/d</td>
<td>39000</td>
</tr>
<tr>
<td></td>
<td><strong>45000</strong></td>
<td></td>
<td><strong>45000</strong></td>
</tr>
</tbody>
</table>

#### Plant and Machinery Account

<table>
<thead>
<tr>
<th>Description</th>
<th>Amt</th>
<th>Description</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance b/d</td>
<td>8540</td>
<td>By Depreciation</td>
<td>5000</td>
</tr>
<tr>
<td>To Bank (purchase)</td>
<td>10460</td>
<td>By Balance c/d</td>
<td>14000</td>
</tr>
<tr>
<td></td>
<td><strong>19000</strong></td>
<td></td>
<td><strong>19000</strong></td>
</tr>
</tbody>
</table>

#### Furniture Account

<table>
<thead>
<tr>
<th>Description</th>
<th>Amt</th>
<th>Description</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance b/d</td>
<td>8540</td>
<td>By Depreciation</td>
<td>5000</td>
</tr>
<tr>
<td>To Bank (purchase)</td>
<td>10460</td>
<td>By Balance c/d</td>
<td>14000</td>
</tr>
<tr>
<td></td>
<td><strong>19000</strong></td>
<td></td>
<td><strong>19000</strong></td>
</tr>
</tbody>
</table>

#### Provision for Taxation Account

<table>
<thead>
<tr>
<th>Description</th>
<th>Amt</th>
<th>Description</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Bank (tax paid)</td>
<td>2250</td>
<td>By Balance b/d</td>
<td>2250</td>
</tr>
<tr>
<td>To Balance c/d</td>
<td>4050</td>
<td>By P &amp; L A/c</td>
<td>4050</td>
</tr>
<tr>
<td></td>
<td><strong>6300</strong></td>
<td></td>
<td><strong>6300</strong></td>
</tr>
</tbody>
</table>
Cash Flow Statement for the year ended 31-12-2015

(i) Cash Flow from Operating Activities

- Profit during the year (8080-3000) 5080
- Add: Depreciation on:
  - Land and building 6000
  - Plant and machinery 5000
  - Furniture 120
  - General reserve (6,500 - 4,500) 2000
  - Taxation provision 4050
  - Proposed dividend 3500
  - Increase in creditors (9070 – 8500) 570

Total Cash Flow from Operating Activities 26320

- Less: Increase in stock (9570 – 8240) (-) 1330
- Less: Increase in debtors (8550 – 7500) (-) 1050

Total Cash Flow from Operating Activities 23940

- Less: Income tax paid (-) 2250

Cash inflow from operating activities 21690

(ii) Cash Flow from Investing Activities

- Less: Purchase of land and building (-) 22000
- Purchase of plant and machinery (-) 10460
- Purchase of furniture (-) 220

Total Cash Flow from Investing Activities (-) 32680

(iii) Cash Flow from Financing Activities

- Add: Issue of equity shares 5000
- Share premium 3000
- Issue of debentures 7000

Total Cash Flow from Financing Activities 15000

- Less: Payment of dividend (-) 3000

Cash inflow from financing activities 12000

Net increase in cash 1010

- Add: Cash balance in the beginning 3420

Cash balance at the end 4430
Illustration 5. The following Balance Sheets are given:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>2014 (Rs.)</th>
<th>2015 (Rs.)</th>
<th>Assets</th>
<th>2014 (Rs.)</th>
<th>2015 (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Share Capital</td>
<td>30000</td>
<td>40,000</td>
<td>Goodwill</td>
<td>11500</td>
<td>9000</td>
</tr>
<tr>
<td>Redeemable Pref. Capital</td>
<td>15000</td>
<td>10,000</td>
<td>Land and Building</td>
<td>20000</td>
<td>17000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>4000</td>
<td>7000</td>
<td>Plant</td>
<td>8000</td>
<td>20000</td>
</tr>
<tr>
<td>Profit and Loss Account</td>
<td>3000</td>
<td>4800</td>
<td>Debtors</td>
<td>16000</td>
<td>20000</td>
</tr>
<tr>
<td>Proposed Dividend</td>
<td>4200</td>
<td>5000</td>
<td>Stock</td>
<td>7700</td>
<td>10900</td>
</tr>
<tr>
<td>Creditors</td>
<td>5500</td>
<td>8300</td>
<td>Bills Receivable</td>
<td>2000</td>
<td>3000</td>
</tr>
<tr>
<td>Bills Payable</td>
<td>2000</td>
<td>1600</td>
<td>Cash in Hand</td>
<td>1500</td>
<td>1000</td>
</tr>
<tr>
<td>Provision for Taxation</td>
<td>4000</td>
<td>5000</td>
<td>Cash at Bank</td>
<td>1000</td>
<td>800</td>
</tr>
</tbody>
</table>

It is also given that:
(a) Depreciation of Rs. 2000 on land and building and Rs.1000 on plant has been charged in 2015.
(b) Interim dividend of Rs. 2000 has been paid in 2015.
(c) Income tax Rs.3500 has been paid during 2015.

Prepare Cash Flow Statement for the year 2015.

Solution:

Cash Flow Statement for the year 2015

(i) **Cash from Operating Activities**

<table>
<thead>
<tr>
<th>Add:</th>
<th>Amt (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit during the year (4800 – 3000)</td>
<td>1800</td>
</tr>
<tr>
<td>Depreciation on plant</td>
<td>1000</td>
</tr>
<tr>
<td>Depreciation on building</td>
<td>2000</td>
</tr>
<tr>
<td>Goodwill written off (11500 – 9000)</td>
<td>2500</td>
</tr>
<tr>
<td>Proposed dividend</td>
<td>5000</td>
</tr>
<tr>
<td>Interim dividend</td>
<td>2000</td>
</tr>
<tr>
<td>General reserve (7000 – 4000)</td>
<td>3000</td>
</tr>
<tr>
<td>Provision for taxation (3500 + 5000 – 4000)</td>
<td>4500</td>
</tr>
<tr>
<td>Increase in creditors (C.L.) (18300 – 5500)</td>
<td>2800</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Less:</th>
<th>Amt (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in bills payable (C.L.) (1600 – 2000)</td>
<td>(-) 400</td>
</tr>
<tr>
<td>Increase in debtors (C.A.) (16000 – 20000)</td>
<td>(-) 4000</td>
</tr>
<tr>
<td>Increase in stock (C.A.) (17700 – 10900)</td>
<td>(-) 3200</td>
</tr>
<tr>
<td>Increase in bills receivable (C.A.) (2000 – 3000)</td>
<td>(-) 1000</td>
</tr>
</tbody>
</table>

24600
Lesson 9  Cash Flow Statement  293

Income tax paid  3500

Cash inflow from operating activities  12500

(ii)  Cash from Investing Activities

Purchase of plant (8500 – 20000 – 1000) (-) 13000
Sale of building (8500 – 17000 – 2000) 1000
Cash outflow from investing activities (-) 12000

(iii)  Cash from Financing Activities

Issue of share capital (40000 – 30000) 10000
Redemption of pref. shares (10000 – 15000) (-) 5000
Dividend paid (-) 4200
Interim dividend paid (-) 2000
Cash outflow from financing activities (-) 1200

Net decrease in cash (-) 700

Cash balance in the beginning
(1500 + 1000) 2500
Cash balance at the end (1000 + 800) 1800

Illustration 6. From the following condensed comparative Balance Sheets of Hotel Hills Ltd., and additional information, prepare a Cash Flow Statement for the year 2015.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital</td>
<td>7000</td>
<td>8000</td>
<td>Plant &amp; Machinery</td>
<td>6200</td>
<td>6600</td>
</tr>
<tr>
<td>Share Premium</td>
<td>900</td>
<td>1100</td>
<td>Accumulation Dep. on plant and mach</td>
<td>(3700)</td>
<td>(2620)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2382</td>
<td>3082</td>
<td>Building</td>
<td>9500</td>
<td>11600</td>
</tr>
<tr>
<td>7% Mortgage loan</td>
<td>--</td>
<td>2000</td>
<td>Accumulation dep. on build.</td>
<td>(4300)</td>
<td>(4500)</td>
</tr>
<tr>
<td>Creditors</td>
<td>690</td>
<td>600</td>
<td>Land</td>
<td>1000</td>
<td>1200</td>
</tr>
<tr>
<td>Outstanding salaries</td>
<td>200</td>
<td>140</td>
<td>Stock</td>
<td>1022</td>
<td>962</td>
</tr>
<tr>
<td>Provision for taxation</td>
<td>100</td>
<td>140</td>
<td>Debtors</td>
<td>860</td>
<td>760</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prepaid expenses</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cash</td>
<td>618</td>
<td>980</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11272</td>
<td>15062</td>
</tr>
</tbody>
</table>

Additional information:

1. Plant costing Rs. 1600 (accumulated depreciation Rs. 1480) was sold during the year for Rs. 120.
2. Building was acquired during the year at a cost of Rs. 2100. In addition to cash payment of Rs. 100 a 7% mortgage loan was raised for the balance.
3. Dividend of Rs. 800 was paid during the year.
4. A sum of Rs. 1390 was transferred to provision for taxation account in 2015.
Solution :

**Cash Flow Statement for the year 2015**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(i) Cash flow from operating activities</strong>:</td>
<td></td>
</tr>
<tr>
<td>Net profit during the year (before divided payment and provision for tax)</td>
<td>2890</td>
</tr>
<tr>
<td>Add : Depreciation – Building (4500 – 3000)</td>
<td>200</td>
</tr>
<tr>
<td>Plant (6600 – 6200)</td>
<td>400</td>
</tr>
<tr>
<td>Decrease in stock (C.A.) (1022 – 962)</td>
<td>60</td>
</tr>
<tr>
<td>Decrease in debtors (C.A.) (860 – 760)</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>760</td>
</tr>
<tr>
<td>Less : Decrease in creditors (600 – 690)</td>
<td>(-) 90</td>
</tr>
<tr>
<td>Decrease in outstanding salaries (140 – 200)</td>
<td>(-) 60</td>
</tr>
<tr>
<td>Increase in prepaid expenses (72 – 80)</td>
<td>(-) 8</td>
</tr>
<tr>
<td>Income tax paid (– 1390 – 100 + 140)</td>
<td>(-) 1350</td>
</tr>
<tr>
<td><strong>Net cash inflow from operating activities</strong></td>
<td>(-) 748</td>
</tr>
</tbody>
</table>

| **(ii) Cash flow from investing activities**                               |              |
| Purchase of Building                                                       | (-) 100     |
| Purchase of plant and machinery                                            | (-) 2000    |
| Purchase of land                                                           | (-) 200     |
| Sale of plant                                                              | 120         |
| **Net cash outflow from investing activities**                             | (-) 2180    |

| **(iii) Cash flow from financing activities**                              |              |
| Issue of shares                                                            | 1000         |
| Share premium                                                              | 200          |
| Dividend paid                                                              | (-) 800      |
| **Net cash inflow from financing activities**                              | 400          |
| **Net Increase in cash**                                                   | 362          |
| Cash in the beginning                                                      | 618          |
| Cash at the end of 2015                                                     | 980          |
Working Notes :

Retained Earnings Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amt</th>
<th>Particulars</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Dividend paid</td>
<td>800</td>
<td>By Balance b/d</td>
<td>2382</td>
</tr>
<tr>
<td>To Balance c/d</td>
<td>3082</td>
<td>By Profit during the year (B.F.)</td>
<td>1500</td>
</tr>
</tbody>
</table>

3882

Plant and Machinery Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amt</th>
<th>Particulars</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance b/d</td>
<td>6200</td>
<td>By Sale of plant</td>
<td>120</td>
</tr>
<tr>
<td>To Bank-Purchase(B.F.)</td>
<td>2000</td>
<td>By Dep. on plant sold</td>
<td>1480</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By Balanced c/d</td>
<td>6600</td>
</tr>
</tbody>
</table>

8200

Accumulated Depreciation on Plant & Mach. Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amt</th>
<th>Particulars</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Plant (Dep.)</td>
<td>1480</td>
<td>By Balance b/d</td>
<td>3700</td>
</tr>
<tr>
<td>To Balance c/d</td>
<td>2620</td>
<td>By P &amp; L A/c (Dep.)</td>
<td>400</td>
</tr>
</tbody>
</table>

4100

Building Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amt</th>
<th>Particulars</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance b/d</td>
<td>9500</td>
<td>By Balance b/d</td>
<td>11600</td>
</tr>
<tr>
<td>To Bank (purchase)</td>
<td>100</td>
<td>By P &amp; L A/c (Dep.)</td>
<td></td>
</tr>
<tr>
<td>To Mortgage Loan</td>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Purchase)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11600

Accumulated Depreciation on Building Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amt</th>
<th>Particulars</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance c/d</td>
<td>4500</td>
<td>By Balance b/d</td>
<td>4300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By P &amp; L A/c (Dep.)</td>
<td>200</td>
</tr>
</tbody>
</table>

4500
Provision for Taxation Account

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amt</th>
<th>Particulars</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Income tax paid (B.F.)</td>
<td>1350</td>
<td>By Balance b/d</td>
<td>100</td>
</tr>
<tr>
<td>To Balance c/d</td>
<td>140</td>
<td>By P &amp; L A/c</td>
<td>1390</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(provision during the year)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1490</td>
<td></td>
<td>1490</td>
</tr>
</tbody>
</table>

**LESSON ROUND-UP**

- CASH FLOW STATEMENT is in statement of changes in cash position from the beginning and till end of the accounting period.
- Accounting Standard (AS) -3 on Cash Flow Statement issued by ICAI is mandatory, AS-3 requires that cash flow statement should report cash flow during the period classified by operating activities, investing activities and financing activities.
- Cash flow means cash inflow and cash outflow.
- Cash inflow means source of cash, and it increases the total cash available at the disposal of the firm.
- Cash outflow means use of cash which decreases the total cash available at the disposal of the firm.
- Net cash flow is the difference between cash inflow and cash outflow.
- Operating activities are the principal revenue activities of the enterprise. These pertain to cash generated by sales and all the operating expenses and are most often the biggest source of cash flows.
- Investing activities pertain to the acquisitions and disposal of long-term assets, such as plant, machinery, land and building and other investments.
- Financing activities are those that result in changes in the size and composition of the owner’s capital and borrowings of the enterprise.

**SELF TEST QUESTIONS**

1. What is a cash flow statement? State its uses and limitations.
2. Which are the various sources and uses of cash flows from operating activities?
3. Distinguish between cash flow statement and funds flow statement.
4. What do you mean by cash from operating activities? How is this calculated?
5. Discuss briefly the major classification of cash flows as per AS-3 (Revised).
6. From the following Balance Sheets of Roop Ltd., prepare a cash flow statement.
Depreciation charged on plant was Rs. 1000 and on building Rs. 6000.

[Ans. Cash from operations Rs. 8150; Net decrease in cash Rs. 350.
Purchase of plant Rs. 7000; purchase of building Rs. 4000]

7. Calculate Cash Flow from Operating Activity

Balance Sheet
As on 1st January, 2017

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Share Capital</td>
<td>15000</td>
<td>20000</td>
<td>Goodwill</td>
<td>3600</td>
<td>2000</td>
</tr>
<tr>
<td>12% Preference share capital</td>
<td>7500</td>
<td>5000</td>
<td>Building</td>
<td>8000</td>
<td>6000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>2000</td>
<td>3500</td>
<td>Plant</td>
<td>4000</td>
<td>10000</td>
</tr>
<tr>
<td>P &amp; L A/c</td>
<td>1500</td>
<td>2400</td>
<td>Debtors</td>
<td>11900</td>
<td>15450</td>
</tr>
<tr>
<td>Creditors</td>
<td>3750</td>
<td>4950</td>
<td>Stock</td>
<td>1000</td>
<td>1500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cash</td>
<td>1250</td>
<td>900</td>
</tr>
<tr>
<td></td>
<td>29750</td>
<td>35850</td>
<td></td>
<td>29750</td>
<td>35850</td>
</tr>
</tbody>
</table>

8. Calculate Cash Flow from Operating Activity

Balance Sheet
As on 1st December, 2017

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Rs.</th>
<th>Assets</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Capital</td>
<td>65000</td>
<td>Fixed Assets</td>
<td>50000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>15000</td>
<td>Less : Dep.</td>
<td>5000</td>
</tr>
<tr>
<td>Profit &amp; Loss Balance</td>
<td>15000</td>
<td>Investment</td>
<td>5000</td>
</tr>
<tr>
<td>Debentures</td>
<td>20000</td>
<td>Sundry Debtors</td>
<td>25000</td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td>20000</td>
<td>Stock</td>
<td>31500</td>
</tr>
<tr>
<td>Proposed Dividend</td>
<td>6000</td>
<td>Cash</td>
<td>141500</td>
</tr>
</tbody>
</table>

[Ans. Cash from operations Rs. 16500; Net increase in cash Rs. 16500]
9. The Balance Sheets of a Prem Limited Company at 31.3.2016 and 31.3.2017 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>31.3.2016</th>
<th>31.3.2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Share Capital</td>
<td>4500</td>
<td>6500</td>
</tr>
<tr>
<td>General Reserve</td>
<td>500</td>
<td>750</td>
</tr>
<tr>
<td>Profit and Loss Account</td>
<td>1000</td>
<td>1500</td>
</tr>
<tr>
<td>Debentures</td>
<td>1000</td>
<td>2000</td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td>870</td>
<td>1100</td>
</tr>
<tr>
<td></td>
<td>7870</td>
<td>11850</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Assets</td>
<td>4600</td>
<td>8300</td>
</tr>
<tr>
<td>Stock</td>
<td>1100</td>
<td>1300</td>
</tr>
<tr>
<td>Debtors</td>
<td>1870</td>
<td>1950</td>
</tr>
<tr>
<td>Cash</td>
<td>200</td>
<td>2500</td>
</tr>
<tr>
<td>Preliminary Expenses</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>7870</td>
<td>11850</td>
</tr>
</tbody>
</table>

**Additional information:**
Depreciation on fixed assets for the year 2016-17 was Rs. 1170. Prepare a Cash Flow Statement.

[Ans. Cash from operations Rs. 1850; Net increase in cash Rs. 50]

10. Balance sheet of XYZ is as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital</td>
<td>7000</td>
<td>7400</td>
<td>Cash</td>
<td>900</td>
<td>780</td>
</tr>
<tr>
<td>Debentures</td>
<td>1200</td>
<td>600</td>
<td>Sundry Debtors</td>
<td>1490</td>
<td>1770</td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td>1036</td>
<td>1184</td>
<td>Stock</td>
<td>4920</td>
<td>4270</td>
</tr>
<tr>
<td>Provision for doubtful debts</td>
<td>70</td>
<td>80</td>
<td>Land</td>
<td>2000</td>
<td>3000</td>
</tr>
<tr>
<td>P &amp; L A/c</td>
<td>1004</td>
<td>1056</td>
<td>Goodwill</td>
<td>1000</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td><strong>10310</strong></td>
<td><strong>10320</strong></td>
<td></td>
<td><strong>10310</strong></td>
<td><strong>10320</strong></td>
</tr>
</tbody>
</table>

**Additional Information:**
(i) Dividend totaling Rs. 350 was paid.
(ii) Land was purchased for Rs. 1000 and amount provided for the amortization of goodwill totaled Rs. 500.
(iii) Debentures of Rs. 600 were redeemed.

Prepare a Cash flow statement.

[Ans. Cash from operations Rs. 1430; Net Decrease in cash Rs. 120]
11. The following are the balance sheets of Yes Ltd., as on 31st December 2016 and 2017

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Share Capital</td>
<td>7,0000</td>
<td>80000</td>
<td>Fixed Assets</td>
<td>50000</td>
<td>60000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>45000</td>
<td>60000</td>
<td>Additions</td>
<td>10000</td>
<td>8000</td>
</tr>
<tr>
<td>Profit and Loss</td>
<td>17300</td>
<td>23300</td>
<td>Depreciation</td>
<td>60000</td>
<td>68000</td>
</tr>
<tr>
<td>Account</td>
<td>70000</td>
<td>90000</td>
<td>Investments</td>
<td>20000</td>
<td>32000</td>
</tr>
<tr>
<td>Trade Creditors</td>
<td>115000</td>
<td>140000</td>
<td>Debtors</td>
<td>40000</td>
<td>36000</td>
</tr>
<tr>
<td>Bank overdrafts</td>
<td>8000</td>
<td>9200</td>
<td>Stock</td>
<td>12000</td>
<td>--</td>
</tr>
<tr>
<td>Creditors for expenses</td>
<td>19700</td>
<td>37000</td>
<td></td>
<td>130000</td>
<td>218500</td>
</tr>
<tr>
<td>Provision for taxation</td>
<td>15000</td>
<td>15000</td>
<td></td>
<td>178000</td>
<td>200000</td>
</tr>
<tr>
<td>Proposed dividends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>360000</td>
<td>454500</td>
<td></td>
<td>36000</td>
<td>454500</td>
</tr>
</tbody>
</table>

The profit for the year 2017 as per profit and loss account after providing for depreciation amounted to Rs. 70,000 which was further adjusted as follows:

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit and Loss balance b/d</td>
<td>17300</td>
<td></td>
</tr>
<tr>
<td>Profit after depreciation but before tax during the year 2017</td>
<td>70000</td>
<td></td>
</tr>
<tr>
<td>Add : Profit on sale of investments</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>89300</td>
<td></td>
</tr>
<tr>
<td>Less : Provision for taxation</td>
<td>36000</td>
<td></td>
</tr>
<tr>
<td>Transfer to reserve</td>
<td>15000</td>
<td></td>
</tr>
<tr>
<td>Proposed dividend</td>
<td>15000</td>
<td>66000</td>
</tr>
<tr>
<td></td>
<td>23300</td>
<td></td>
</tr>
</tbody>
</table>

You are informed that:

(i) The sales and purchases of the year 2017 amounted to Rs. 8000 and Rs. 6500 respectively.

(ii) In arriving at the profit from sales referred to already, the cost of sales and administrative and selling expenses were deducted.

Prepare Cash Flow Statement for the year 2017

[Ans. Net cash outflow from operating activities Rs. 26000; Net decrease in cash (bank over draft Rs. 25000)]
12. The Balance Sheet of Smartkart Ltd, as at March 31st 2016 and 2017 are given follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cash</td>
<td>600</td>
<td>800</td>
</tr>
<tr>
<td>Accumulated Depreciation</td>
<td>2000</td>
<td>2150</td>
<td>Debtors</td>
<td>700</td>
<td>1200</td>
</tr>
<tr>
<td>Creditors</td>
<td>720</td>
<td>900</td>
<td>Prepaid Rent</td>
<td>360</td>
<td>240</td>
</tr>
<tr>
<td>Taxes Payable</td>
<td>600</td>
<td>600</td>
<td>Stock</td>
<td>3200</td>
<td>2800</td>
</tr>
<tr>
<td>Bills payable</td>
<td>1400</td>
<td>2600</td>
<td>Investments</td>
<td>4000</td>
<td>4000</td>
</tr>
<tr>
<td>Debentures</td>
<td>3500</td>
<td>3500</td>
<td>Fixed Assets</td>
<td>7000</td>
<td>8800</td>
</tr>
<tr>
<td>Equity capital</td>
<td>5000</td>
<td>6000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit and Loss Account</td>
<td>2640</td>
<td>2090</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15860</td>
<td>17840</td>
<td></td>
<td>15860</td>
<td>17840</td>
</tr>
</tbody>
</table>

Additional information

1. Purchased a new fixed asset costing Rs. 2500; paid Rs. 1300 cash and given short-term bills payable for the remainder.

2. Net loss for the year ending 31-3-2017 was Rs. 150.

3. One fully depreciated asset of an original cost of Rs. 700 and no salvage value was abandoned.

[Ans. Cash inflow from operating activities Rs. 900; Net increase in cash Rs. 200]

[Hint. Tax paid Rs. 600, Dividend paid Rs. 400 [i.e. 2640 – 150-2090]
Lesson 10
Accounting Standards (AS)

LESSON OUTLINE

- Application of Accounting Standards
- Standards Setting Process
- Benefits and Limitations of Accounting Standards
- Enterprises to which the Accounting Standards Apply
- List of Accounting Standards
- Need for Convergence towards Global Standards
- International Accounting Standard Board
- Differences (IFRS Vs IGAAP)
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

Accounting is the language of any business. The Accounting is looked upon to provide analysis of assets, financial stability, financial performance, record-keeping and more. To provide accurate and reliable information financial statements must be clearly understandable and comparable so that stakeholders may compare the performance of one business with another similar business. Thus all general purpose financial statements should be prepared in accordance with the same uniform guidelines. That is the purpose of accounting standards. The objective of this lesson is to make students learn the basics of accounting standards.

After studying this chapter you will be able to:

1. Understand the concept of Accounting Standards.
2. Grasp the objectives, benefits and limitations of Accounting Standards.
3. Learn the standards setting process.
4. Familiarize with the overview of Accounting Standards in India.
5. Recognize the International Accounting Standard Authorities.
6. Appreciate the adoption of International Financial Reporting Standards as global standards.
INTRODUCTION

Accounting Standards (ASs) are written policy documents issued by expert accounting body or by government or other regulatory body covering the aspects of recognition, measurement, presentation and disclosure of accounting transactions in the financial statements. The ostensible purpose of the standard setting bodies is to promote the dissemination of timely and useful financial information to investors and certain other parties having an interest in the company’s economic performance. Accounting Standards reduce the accounting alternatives in the preparation of financial statements within the bounds of rationality, thereby ensuring comparability of financial statements of different enterprises.

Accounting Standards Deal with the Issues of

(i) recognition of events and transactions in the financial statements,

(ii) measurement of these transactions and events,

(iii) presentation of these transactions and events in the financial statements in a manner that is meaningful and understandable to the reader, and

In brief, the Accounting Standards aim at improving the quality of financial reporting by promoting comparability, consistency and transparency, in the interests of users of financial statements. Good financial reporting not only promotes healthy financial markets, it also helps to reduce the cost of capital because investors can have faith in financial reports and consequently perceive less risks.

STANDARDS SETTING PROCESS

The Institute of Chartered Accountants of India (ICAI), being a premier accounting body in the country, took upon itself the leadership role by constituting the Accounting Standards Board (ASB) in 1977. The ICAI has taken significant initiatives in the setting and issuing procedure of Accounting Standards to ensure that the standard-setting process is fully consultative and transparent. The ASB considers the International Accounting Standards (IASs)/International Financial Reporting Standards (IFRSs) while framing Indian Accounting Standards (ASs) and try to integrate them, in the light of the applicable laws, customs, usages and business environment in the country. The composition of ASB includes representatives of industries (namely, ASSOCHAM, CII, FICCI), regulators, academicians, government departments, etc. Although ASB is a body constituted by the Council of the ICAI, it (ASB) is independent in the formulation of Accounting Standards and Council of the ICAI but it is not empowered to make any modifications in the draft of Accounting Standards formulated by ASB without consulting with the ASB.

The standard-setting procedure of Accounting Standards Board (ASB) can be briefly outlined as follows:

1. Identification of broad areas by ASB for formulation of AS.

2. Constitution of study groups by ASB to consider specific projects and to prepare preliminary drafts of the proposed Accounting Standards. The draft normally includes objective and scope of the standard, definitions of the terms used in the standard, recognition and measurement principles, wherever applicable, and presentation and disclosure requirements.

3. Consideration of the preliminary draft prepared by the study group of ASB and revision, if any, of the draft on the basis of deliberations.

4. Circulation of draft of Accounting Standard (after revision by ASB) to the Council members of the ICAI and specified outside bodies, such as Department of Company Affairs (DCA), Securities and Exchange Board of India (SEBI), Comptroller and Auditor General of India (C&AG), Central Board of Direct Taxes (CBDT), Standing Conference of Public Enterprises (SCOPE), etc., for comments.
5. Meeting with the representatives of the specified outside bodies to ascertain their views on the draft of the proposed Accounting Standard.

6. Finalization of the exposure draft of the proposed Accounting Standard and its issuance inviting public comments.

**BENEFITS AND LIMITATIONS**

Accounting Standards seek to describe the accounting principles, the valuation techniques and the methods of applying the accounting principles in the preparation and presentation of financial statements so that they may give a true and fair view. By setting the Accounting Standards the accountant has following benefits:

(i) **Standardization of alternative accounting treatments**: Standards reduce to a reasonable extent or eliminate altogether confusing variations in the accounting treatments used to prepare financial statements.

(ii) **Requirements for additional disclosures**: There are certain areas where important information not statutorily required to be disclosed. Standards may call for disclosure if required by law.

(iii) **Comparability of financial statements**: The application of Accounting Standards would, to a limited extent, facilitate comparison of financial statements of companies situated in different parts of the world, and also of different companies situated in the same country. However, it should be noted in this respect the differences in the institutions, traditions and legal systems from one country to another give rise to differences in Accounting Standards adopted in different countries.

However, there are some limitations of setting of Accounting Standards:

(i) **Difficulties in making choice between different treatments**: Different continues may give alternative solutions to certain accounting problems and have arguments to recommend them. Therefore, the choice between different alternative accounting treatments may become difficult.

(ii) **Lack of flexibilities**: There may be a trend towards rigidity which could lead different countries to be less flexibility in applying the Accounting Standards.

(iii) **Restricted scope**: Accounting Standards cannot override the statute. The standards are required to be framed within the ambit of prevailing statutes.

**How many Accounting Standards?**

The council of the Institute of Chartered Accountants of India has, so far, issued thirty two Accounting Standards. However, AS 8 on ‘Accounting for Research and Development’ has been withdrawn consequent to the issuance of AS 26 on ‘Intangible Assets’. Thus effectively, there are 27 Accounting Standards at present.

The standards are developed by the Accounting Standards Board (ASB) of the Institute and are issued under the authority of its Council. The institute not being a legislative body can enforce compliance with its standards only by its members. Also, the standards cannot override laws and local regulations. The Accounting Standards are nevertheless made mandatory from the dates specified in respective standards and are generally applicable to all enterprises, subject to certain exception as stated below. The implication of mandatory status of an Accounting Standard depends on whether the statute governing the enterprise concerned requires compliance with the standard.

In assessing whether an Accounting Standard is applicable, one must find correct answer to the following three questions.

(a) Does it apply to the enterprise concerned? If yes, the next question is:
(b) Does it apply to the financial statement concerned? If yes, the next question is:
(c) Does it apply to the financial item concerned?

**APPLICABILITY OF ACCOUNTING STANDARDS**

For the purpose of compliance of the Accounting Standards, the ICAI had earlier issued an announcement on ‘Criteria for Classification of Entities and Applicability of Accounting Standards’. As per the announcement, entities were classified into three levels. Level II entities and Level III entities as per the said Announcement were considered to be Small and Medium Entities (SMEs).

However, when the Accounting Standards were notified by the Central Government in consultation with the National Advisory Committee on Accounting Standards, the Central Government also issued the ‘Criteria for Classification of Entities and Applicability of Accounting Standards’ for the companies. It is pertinent to note that the Accounting Standards notified by the government were mandatory for the companies since it was notified in pursuant to Sections 211(3C).

According to the ‘Criteria for Classification of Entities and Applicability of Accounting Standards’ as issued by the Government, there are two levels, namely, Small and Medium-sized Companies (SMCs) as defined in the Companies (Accounting Standards) rules, 2006 and companies other than SMCs. Non-SMCs are required to comply with all the Accounting Standards in entirety, while certain exemptions/relaxations have been given to SMCs.

Consequent to certain differences in the criteria for classification of the levels of entities as issued by the ICAI and as notified by the Central Government for Companies, the Accounting Standard Board of the ICAI decided to revise its ‘Criteria for Classification of Entities and Applicability of Accounting Standards’ and make the same applicable only to non-corporate entities. Though the classification criteria and applicability of Accounting Standards has been largely aligned with the criteria prescribed for corporate entities, it was decided to continue with the three levels of entities for non-corporate entities vis-à-vis two levels prescribed for corporate entities as per the government notification.

No relaxation was given to Level II and III enterprises with regard to recognition and measurement principles. Relaxations were provided with regard to disclosure requirements.

Criteria for classification of non-corporate entities as decided by the Institute of Chartered Accountants of India were accepted.

**Level I Entities**

Non-corporate entities, which fall in any one or more of the following categories, at the end of the relevant accounting period are classified as Level I entities:

(i) Entities whose equity or debt securities are listed or are in the process of listing on any stock exchange, whether in India or outside India.

(ii) Banks (including cooperative banks), financial institutions or entities carrying on insurance business.

(iii) All commercial, industrial and business reporting entities, whose turnover (excluding other income) exceeds rupees fifty crore in the immediately preceding accounting year.

(iv) All commercial, industrial and business reporting entities having borrowings (including public deposits) in excess of rupees ten crore at any time during the immediately preceding accounting year.

(v) Holding and subsidiary entities of any one of the above. Level II Entities (SMEs)
Non-corporate entities which are not Level I entities but fall in any one or more of the following categories are classified as Level II entities:

(i) All commercial, industrial and business reporting entities, whose turnover (excluding other income) exceeds rupees one crore but does not exceed rupees fifty crore in the immediately preceding accounting year.

(ii) All commercial, industrial and business reporting entities having borrowings (including public deposits) in excess of rupees one crore but not in excess of rupees ten crore at any time during the immediately preceding accounting year.

(iii) Holding and subsidiary entities of any one of the above. Level III Entities (SMEs)

Non-corporate entities which are not covered under Level I and Level II are considered as Level III entities.

Additional Requirements

(1) An SME which does not disclose certain information pursuant to the exemptions or relaxations given to it should disclose (by way of a note to its financial statements) the fact that it is an SME and has complied with the Accounting Standards in so far as they are applicable to entities falling in Level II or Level III, as the case may be.

(2) Where an entity, being covered in Level II or Level III, had qualified for any exemption or relaxation previously but no longer possesses qualifies for the relevant exemption or relaxation in the current accounting period, the relevant standards or requirements become applicable from the current period and the figures for the corresponding period of the previous accounting period need not be revised merely by reason of its having ceased to be covered in Level II or Level III, as the case may be. The fact that the entity was covered in Level II or Level III, as the case may be, in the previous period and it had availed of the exemptions or relaxations available to that Level of entities should be disclosed in the notes to the financial statements.

(3) Where an entity has been covered in Level I and subsequently, ceases to be so covered, the entity will not qualify for exemption/relaxation available to Level II entities, until the entity ceases to be covered in Level I for two consecutive years. Similar is the case in respect of an entity, which has been covered in Level I or Level II and subsequently, gets covered under Level III.

(4) If an entity covered in Level II or Level III opts not to avail of the exemptions or relaxations available to that Level of entities in respect of any but not all of the Accounting Standards, it should disclose the Standard(s) in respect of which it has availed the exemption or relaxation.

(5) If an entity covered in Level II or Level III desires to disclose the information not required to be disclosed pursuant to the exemptions or relaxations available to that Level of entities, it should disclose that information in compliance with the relevant Accounting Standard.

(6) An entity covered in Level II or Level III may opt for availing certain exemptions or relaxations from compliance with the requirements prescribed in an Accounting Standard: Provided that such a partial exemption or relaxation and disclosure should not be permitted to mislead any person or public.

(7) In respect of Accounting Standard (AS) 15, Employee Benefits, exemptions/relaxations are available to Level II and Level III entities, under two sub-classifications, viz., (i) entities whose average number of persons employed during the year is 50 or more, and (ii) entities whose average number of persons employed during the year is less than 50. The requirements stated in paragraphs (1) to (6) above, mutatis mutandis, apply to these sub-classifications.
Criteria for classification of Companies under the Companies (Accounting Standard) Rules, 2006

Small-and Medium-Sized Companies (SMC) as defined in Clause 2(f) of the Companies (Accounting Standards) Rules, 2006:

“Small-and Medium-Sized Company” (SMC) means, a company-

(i) whose equity or debt securities are not listed or are not in the process of listing on any stock exchange, whether in India or outside India;

(ii) which is not a bank, financial institution or an insurance company;

(iii) whose turnover (excluding other income) did not exceed rupees fifty crore in the immediately preceding accounting year;

(iv) which does not have borrowings (including public deposits) in excess of rupees ten crore at any time during the immediately preceding accounting year; and

(v) which is not a holding or subsidiary company of a company that is not a small-and medium-sized company.

Explanation: For the purposes of clause (f), a company shall qualify as a Small and Medium Sized Company, if the conditions mentioned therein are satisfied as at the end of the relevant accounting period.

Non-SMCs

Companies not falling within the definition of SMC are considered as Non- SMCs.

Enterprises to which the Accounting Standards Apply

Accounting Standards apply in respect of any enterprise (whether organised in corporate, co-operative or other forms) engaged in commercial, industrial or business activities, whether or not profit oriented and even if established for charitable or religious purposes. Accounting Standards however, do not apply to enterprises solely carrying on the activities, which are not of commercial, industrial or business nature, (e.g., an activity of collecting donations and giving them to flood affected people). Exclusion of an enterprise from the applicability of the Accounting Standards would be permissible only if no part of the activity of such enterprise is commercial, industrial or business in nature. Even if a very small proportion of the activities of an enterprise were considered to be commercial, industrial or business in nature, the Accounting Standards would apply to all its activities including those, which are not commercial, industrial or business in nature.

Implication of Mandatory Status

Where the statute governing the enterprise does not require compliance with the Accounting Standards, e.g. a partnership firm, the mandatory status of an Accounting Standard implies that, in discharging their attest functions, the members of the Institute are required to examine whether the financial statements are prepared in compliance with the applicable Accounting Standards. (See Scheme of Applicability of Accounting Standards given in para 2.3) In the event of any deviation from the Accounting Standards, they have the duty to make adequate disclosures in their reports so that the users of financial statements may be aware of such deviations. It should nevertheless be noted that responsibility for the preparation of financial statements and for making adequate disclosure is that of the management of the enterprise. The auditor’s responsibility is to form his opinion and report on such financial statements.

Financial items to which the Accounting Standards apply

The Accounting Standards are intended to apply only to items, which are material. An item is considered material,
if its omission or misstatement is likely to affect economic decision of the user. Materiality is not necessarily a function of size; it is the information content i.e. the financial item which is important. A penalty of ₹ 50,000 paid for breach of law by a company can seem to be a relatively small amount for a company incurring crores of rupees in a year, yet is a material item because of the information it conveys. The materiality should therefore be judged on case-to-case basis. If an item is material, it should be shown separately instead of clubbing it with other items. For example it is not appropriate to club the penalties paid with legal charges.

### ACCOUNTING STANDARDS APPLICABLE TO ALL COMPANIES

| AS 1 | Disclosures of Accounting Policies |
| AS 2 | Valuation of Inventories |
| AS 4 | Contingencies and Events Occurring After the Balance Sheet Date |
| AS 5 | Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies |
| AS 6 | *Depreciation Accounting |
| AS 7 | Construction Contracts (revised 2002) |
| AS 9 | Revenue Recognition |
| AS 10 | Accounting for Fixed Assets |
| AS 12 | Accounting for Government Grants |
| AS 13 | Accounting for Investments |
| AS 14 | Accounting for Amalgamations |
| AS 16 | Borrowing Costs |
| AS 18 | Related Party Disclosures |
| AS 22 | Accounting for Taxes on Income |
| AS 24 | Discontinuing Operations |
| AS 25 | Interim financial Reporting |
| AS 26 | Intangible Assets |
| AS 27 | Financial Reporting of Interest in Joint Venture |
| AS 28 | Impairment of Assets |
| AS 30 | *Financial Instruments: Recognition and Measurement |
| AS 31 | *Financial Instruments: Presentation |
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*In March 2016 withdrawn by ICAI

Exemptions or Relaxations for SMCs as defined in the Notification

(A) Accounting Standards not applicable to SMCs in their entirety:

AS 3    Cash Flow Statements.

AS 17   Segment Reporting

(B) Accounting Standards not applicable to SMCs since the relevant Regulations require compliance with them only by certain Non-SMCs:

(i) AS 21, Consolidated Financial Statements

(ii) AS 23, Accounting for Investments in Associates in Consolidated Financial Statements
(iii) AS 27, Financial Reporting of Interests in Joint Ventures (to the extent of requirements relating to Consolidated Financial Statements)

(C) Accounting Standards in respect of which relaxations from certain requirements have been given to SMCs:

(i) Accounting Standard (AS) 15, Employee Benefits (revised 2005)
(ii) AS 19, Leases
(iii) AS 20, Earnings Per share
(iv) AS 28, Impairment of Assets
(v) AS 29, Provisions, Contingent Liabilities and Contingent Assets

AS 01. Disclosure of Accounting Policies

Accounting policies are the specific accounting principles and the methods of applying those principles adopted by an enterprise in the preparation and presentation of financial statements.

All significant accounting policies should be disclosed.

Such disclosure form part of financial statements.

All disclosures should be made at one place.

Specific disclosure for the adoption of fundamental accounting assumptions is not required.

Disclosure of accounting policies cannot remedy a wrong or inappropriate treatment of the item in the accounts.

AS 02. Valuation of Inventories

Inventories should be valued at the lower of cost and net realizable value.

The cost of inventories should comprise

(a) All costs of purchase
(b) Costs of conversion
(c) Other costs incurred in bringing the inventories to their present location and condition

AS 03. Cash Flow Statements

Cash Flows are inflows and outflows of cash and cash equivalents.

Cash Flow Statement represents the cash flows during the specified period by operating, investing and financing activities.

AS 04. Contingencies and Events Occurring After the Balance Sheet Date

Contingency is a condition or situation, the ultimate outcome of which, gain or loss, will be known or determined only on the occurrence, or non-occurrence, of one or more uncertain future events.

Accounting Treatment:

If it is likely that a contingency will result in

LOSS: It is prudent to provide for that loss in the financial statements.

PROFIT: Not recognized as revenue (However, when the realization of a gain is virtually certain, then such gain is not a contingency and accounting for the gain is appropriate.)
**AS 05. Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies**

All items of income and expense, which are recognized in a period, should be included in the determination of net profit or loss for the period, unless an Accounting Standard requires, or permits otherwise.

The net profit or loss for the period comprises the following components, each of them should be disclosed on the face of the statement of profit and loss:

- Profit or loss from ordinary activities; and
- Extraordinary items.

**AS 06. Depreciation Accounting**

Depreciation is a measure of the wearing out, consumption or other loss of value of a depreciable asset arising from use, passage of time or obsolescence through technology and market changes. Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the expected useful life of the asset. Depreciation includes amortization of assets whose useful life is predetermined.

The depreciable amount of a depreciable asset should be allocated on a systematic basis to each accounting period during the useful life of the asset.

**AS 07. Construction Contracts**

A construction contract is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use.

**AS 09. Revenue Recognition**

Revenue is the gross inflow of cash, receivables or other consideration arising in the course of the ordinary activities of an enterprise from the sale of goods, from the rendering of services, and from the use by others of enterprise resources yielding interest, royalties and dividends.

**AS 10. Accounting for Fixed Assets**

A Fixed Asset is an asset held with the intention of being used for the purpose of producing or providing goods or services and is not held for sale in the normal course of business. (It is expected to be used for more than one accounting period.)

**AS 12. Accounting for Government Grants**

Applicability: Mandatory for all enterprises with effect from 01/04/1994.

Government Grants are assistance by the government in cash or kind for past or future compliance with certain conditions.

**AS 13. Accounting for Investments**

Applicability: Mandatory for all enterprises.

Investments are classified as Long-Term Investments and Short-Term Investments.

Current Investment is intended to be held for not more than one year and readily realisable.

Long-term Investment is an investment other than a current investment.

The carrying amount of current investments is lower of cost and fair value.
AS 15. Accounting for Retirement Benefits in the financial Statements of Employers

Applicability: It is mandatory for all enterprises.

Retirement Benefits consists of:

1. Provident Fund
2. Superannuation / Pension
3. Gratuity
4. Leave Encashment Benefit
5. Other Retirement Benefits

Accounting treatment under Defined Contribution Scheme/ Provident Fund
Contribution payable by the employer in a year is charged to profit & loss account

Accounting treatment under Defined Benefit Scheme/ Gratuity/ Leave Encashment
Payment of Retirement Benefit out of its own fund

AS 16. Borrowing Costs

Applicability: Mandatory for all enterprises w.e.f. 01/04/2000.

Borrowing Costs include:

- Interest and commitment charges on borrowings;
- Amortization of discounts or premiums relating to borrowings;
- Amortization of ancillary costs incurred in connection with the arrangement of borrowings; and
- Exchange difference arising from borrowings to the extent it amounts to interest costs.

Borrowing costs should be recognized as an expense in the period in which they are incurred.

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalized as part of that asset.

AS 17. Segment Reporting

A BUSINESS SEGMENT is a distinguishable component of an enterprise engaged in providing an individual product or service or a group of related products or services subject to risks and returns that are different from those of other business segments.

AS 18. Related Party Disclosure

Applicability: Mandatory for all enterprises with respect from 01/04/2004

Related party is considered to be related if at any time during the reporting period one party has the ability to control the other party or exercise significant influence over the other party in making financial and/or operating decisions.

AS 19. Leases

Applicability: Mandatory for all enterprises w.e.f. 1.04.2001.

It should be applied in accounting for all leases other than:
(a) lease agreements to explore for or use natural resources;
(b) licensing agreements for items such as plays, manuscripts, patents and copyrights; and
(c) lease agreements to use lands.

Lease: A lease is an agreement whereby the lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time.

AS 20. Earning Per Share

Applicability: Mandatory w.e.f. 1.04.2001 in respect of enterprises whose equity shares or potential equity shares are listed on a recognized stock exchange in India.

An enterprise should present BASIC & DILUTED EPS on the face of the statement of Profit and Loss Account for each class of equity shares that has different rights to have a share in the net profit for the period. EPS has to be calculated & presented even in the case of losses.

AS 21. Consolidated Financial Statements

1. This standard should be applied in the preparation and presentation of consolidated financial statements for a group of enterprises under the control of a parent.
2. This Standard should also be applied in accounting for investments in subsidiaries in the separate financial statements of a parent.
3. In the preparation of consolidated financial statements, other Accounting Standards also apply in the same manner as they apply to the separate financial statements.

AS 22. Accounting for Taxes on Income

Accounting Income (loss) is the net profit or loss for a period, as reported in the statement of profit and loss, before deducting income tax expense or adding income tax saving. (i.e., PBT as per P/L A/c)

AS 23. Accounting for Investments in Associates in Consolidated Financial Statements

The Consolidated Financial Statements include investments in associates accounted on the equity method in accordance with Accounting Standard 23(Accounting for Investments in Associates in Consolidated Financial Statements) and the jointly controlled entities accounted in accordance with Accounting Standard 27.

AS 24. Discontinuing Operations

A discontinuing operation is a component of an enterprise:
(a) That the enterprise, pursuant to a single plan, is:
   disposing of substantially in its entirety (example – demerger)
   disposing of piecemeal (selling and settling assets and liabilities one by one)
   terminating through abandonment; and
(b) That represents a separate major line of business or geographical area of operations; and
(c) That can be distinguished operationally and for financial reporting purposes.

AS 25. Interim Financial Reporting

The objective of this Standard is to prescribe the minimum content of an interim financial report and to prescribe the principles for recognition and measurement in a complete or condensed financial statements for an interim
period. Timely and reliable interim financial reporting improves the ability of investors, creditors, and others to understand an enterprise’s capacity to generate earnings and cash flows, its financial condition and liquidity.

**AS 26. Intangible Assets**

An Intangible assets can be defined as non-monitory assets having no physical substance, held for use in the production or services for rental to others, or for administrative purposes.

(a) Intangible assets can be sold  
(b) Non-monetary assets are those who sales proceeds using in no money.  
(c) Assets mean resources, under the control of entity and having future economic benefits. 
(d) Non physical substance except storage devices  
(e) Held for use means used in production, administration or can be given for rental.

**AS 27. Financial Reporting of Interests in Joint Ventures**

1. This Standard should be applied in accounting for interests in joint ventures and the reporting of joint venture assets, liabilities, income and expenses in the financial statements of venturers and investors, regardless of the structures or forms under which the joint venture activities take place. 
2. The requirements relating to accounting for joint ventures in consolidated financial statements, contained in this Standard, are applicable only where consolidated financial statements are prepared and presented by the venturer.

**AS 28. Impairment of Assets**

Impairment of Assets means depreciation in the value of assets. An enterprise should assess at each balance sheet date whether there is any indication that any of its assets are impaired. If any such indication exists, the enterprise should estimate the recoverable amount of the asset.

**AS 29. Provisions, Contingent Liabilities & Contingent Assets**

A provision is a liability which can be measured only by using a substantial degree of estimation.  
**Treatment** : A provision should be recognized when:  
An enterprise has a present obligation as a result of past event.  
It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation.  
A reliable estimate can be made of the amount of the obligation.

**NEED FOR CONVERGENCE TOWARDS GLOBAL STANDARDS**

The last decade has witnessed a sea change in the global economic scenario. The emergence of transnational corporations in search of money, not only for fuelling growth, but to sustain on going activities has necessitated raising of capital from all parts of the world, cutting across frontiers.

Each country has its own set of rules and regulations for accounting and financial reporting. Therefore, when an enterprise decides to raise capital from the markets other than the country in which it is located, the rules and regulations of that other country apply, and this in turn will require that the enterprise is in a position to understand the differences between the rules governing financial reporting in the foreign country as compared to its own country of origin. Therefore, translation and re-instatements are of utmost importance in a world that is rapidly globalizing in all ways. In themselves also, the Accounting Standards and principle need to be robust...
so that the larger society develops degree of confidence in the financial statements, which are put forward by organizations.

International analysts and investors would like to compare financial statements based on similar Accounting Standards, and this has led to the growing support for an internationally accepted set of Accounting Standards for cross-border filings. The harmonization of financial reporting around the world will help to raise confidence of investors generally in the information they are using to make their decisions and assess their risks.

Also a strong need was felt by legislation to bring about uniformity, rationalization, comparability, transparency and adaptability in financial statements. Having a multiplicity of Accounting Standards around the world is against the public interest. If accounting for the same events and information produces different reported numbers, depending on the system of standards that are being used, it is self-evident that accounting will be increasingly discredited in the eyes of those using the numbers. It creates confusion, encourages error and facilitates fraud. The cure for these ills is to have a single set of global standards, of the highest quality, set in the interest of public. Global Standards facilitate cross-border flow of money, global listing in different bourses and comparability of financial statements.

The convergence of financial reporting and Accounting Standards is a valuable process that contributes to the free flow of global investment and achieves substantial benefits for all capital market stakeholders. It improves the ability of investors to compare investments on a global basis and thus lowers their risk of errors of judgment. It facilitates accounting and reporting for companies with global operations and eliminates some costly requirements reinstatement of financial statements. It has the potential to create a new standard of accountability and greater transparency, which are values of great significance to all market participants, including regulators. It reduces operational challenges for accounting firms and focuses their value and expertise around an increasingly unified set of standards. It creates an unprecedented opportunity for standard setters and other stakeholders to improve the reporting model. For the companies with joint listings in both domestic and foreign country, the convergence is very much significant.

INTERNATIONAL ACCOUNTING STANDARD BOARD

With a view of achieving these objectives, the London-based group namely the International Accounting Standards Committee (IASC), responsible for developing International Accounting Standards, was established in June, 1973. It is presently known as International Accounting Standards Board (IASB). The IASC comprises the professional accountancy bodies of over 75 countries (including the Institute of Chartered Accountants of India). Primarily, the IASC was established, in the public interest, to formulate and publish, International Accounting Standards to be followed in the presentation of audited financial statements. International Accounting Standards were issued to promote acceptance and observance of International Accounting Standards worldwide. The members of IASC have undertaken a responsibility to support the standards promulgated by IASC and to propagate those standards in their respective countries.

Between 1973 and 2001, the International Accounting Standards Committee (IASC) released International Accounting Standards. Between 1997 and 1999, the IASC restructured their organization, which resulted in the formation of International Accounting Standards Board (IASB). These changes came into effect on 1st April, 2001. Subsequently, IASB issued statements about current and future standards: IASB publishes its Standards in a series of pronouncements called International Financial Reporting Standards (IFRS). However, IASB has not rejected the standards issued by the ISAC. Those pronouncements continue to be designated as “International Accounting Standards” (IAS). The IASB approved IASB Resolution on IASC Standards at their meeting in April, 2001, in which it confirmed the status of all IASC Standards and SIC Interpretations in would come into effect on 1st April, 2001.

International Financial Reporting Standards (IFRS) as Global Standards

The term IFRS comprises IFRS issued by IASB, IAS issued by International Accounting Standards Committee
(IASC), and Interpretations issued by the Standard Interpretations Committee (SIC) and the International Financial Reporting Interpretations Committee (IFRIC) of the IASB.

International Financial Reporting Standards (IFRSs) are considered a “principles-based” set of standards. In fact, they establish broad rules rather than dictating specific treatments. Every major nation is moving towards adopting them to some extent. Large number of authorities requires public companies to use IFRS for stock-exchange listing purposes, and in addition, banks, insurance companies and stock exchanges may use them for their statutorily required reports. So over the next few years, thousands of companies will adopt the international standards. This requirement will affect about 7,000 enterprises, including their subsidiaries, equity investors and joint venture partners. The increased use of IFRS is not limited to public-company listing requirements or statutory reporting. Many lenders and regulatory and government bodies are looking to IFRS to fulfil local financial reporting obligations related to financing or licensing.

International Financial Reporting Standards comprise –

- 29-International Accounting Standards (IAS) – standards issued before 2001 by IASC which are still valid.
- 11–interpretations issued by Standing Interpretations Committee (SIC) before 2001.

However, in practice IFRS is interchangeably used to denote individual Accounting Standards issued by IASB as well as International accounting principles collectively. Following are some of the advantages of IFRS:

- It would facilitate increased comparability of financial information among companies operating in different countries.
- The financial reporting process would become more transparent.
- The standardization of accounting methodology provides creditors and investors with the ability to analyze businesses around the world using the same financial methods.
- It would also permit international capital to flow more freely.
- It would give investors a better understanding to the financial statements and assess the investment opportunities in other countries.
- It would also benefit the accounting professionals as they will be able to sell their services in the different parts of the world.

All these benefits of IFRS have prompted many countries to pursue convergence of national Accounting Standards with IFRS. India has also decided to facilitate the convergence of the Indian Accounting Standards with IFRS and in this direction all existing Accounting Standards are being revised and converged with corresponding IAS/IFRS. Convergence of entire world towards IFRS would benefit the corporate sector, investors, regulators and facilitate economic growth as a whole.

**Adoption of IFRS in India**

Increasingly, Indian accountants and businessmen strangle feel the need for convergence with IFRS. Capital markets provide an important explanation for this change. Some Indian companies are already listed on overseas stock exchanges and many more will list in the future. Internationally acceptable Accounting Standards are becoming the language of communication for Indian companies.

Also, the recent stream of overseas acquisitions by Indian companies makes a compelling case for adoption of
high quality standards to convince foreign enterprises about the financial standing, as also the disclosure and governance standards of Indian acquirers. Convergence with IFRS would require several changes in Indian laws and decision processes.

In India, the Institute of Chartered Accountants of India (ICAI) is on the way towards convergence of its Standards with Global Standards. Divergences have been minimized to the maximum possible extent in the areas wherein full convergence is difficult. Recognizing the growing need of full convergence of Indian Accounting Standards with IFRSs, ICAI constituted a Task Force to examine various issues involved. Full convergence involves adoption of IFRSs in the same form as that issued by the IASB. While formulating the Accounting Standards, ICAI recognizes the legal and other conditions prevailing in India and makes deviations from the corresponding IFRSs.

**WHY IFRS?**

**Features of IFRS:**

(A) Single set of Accounting Standards would enable internationally to standardize and assure better quality on a global screen,

(B) It would also permit international capital to flow more freely, enabling companies to develop consistent global practices on accounting problems.

(C) It would be beneficial to the regulators too, as the complexity associated with needing to understand various reporting regimes would be reduced.

(D) For investors, it gives a better understanding to the financial statements and assess the investment opportunities other than their Home Country.

(E) It also benefits the accounting professionals in a way that they will be able to sell their services in the different parts of world

**DIFFERENCES (IFRS Vs IGAAP)**

<table>
<thead>
<tr>
<th>First time adoption</th>
<th>Full retrospective application of IFRS to PL and BS. Reconciliation of PL and BS with respect of last year’s reported numbers under previous GAAP.</th>
<th>No needs to prepare reconciliation on first time adoption.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components of Financial Statements</td>
<td>Comprises Balance Sheet, Profit and Loss A/c. Cash Flow Statement, changes in equity and accounting policy and notes to Accounts.</td>
<td>Comprises of Balance Sheet, Profit and Loss A/c. Cash Flow Statement (if applicable), and Notes to Accounts</td>
</tr>
<tr>
<td>Balance Sheet</td>
<td>No particular format, a current/non current presentation of assets and liabilities is used.</td>
<td>As per Format Prescribed in Schedule III for Companies, adherence to Banking Regulation for Banks, etc.</td>
</tr>
<tr>
<td>Income Statement</td>
<td>No particular format prescribed (IAS-1).</td>
<td>As per Format Prescribed in Schedule III (AS-1).</td>
</tr>
<tr>
<td>Cash Flow Statements</td>
<td>Mandatory for all entities (IAS-7).</td>
<td>Level 3 entities are exempted (AS-3).</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
<td>Note</td>
</tr>
<tr>
<td>-------</td>
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<td>------</td>
</tr>
<tr>
<td>Dividends</td>
<td>Liability to be recognized in the period when dividend is declared. (IAS-10).</td>
<td>Recognized as an appropriation against the profit, and recorded as liability at BS date even if declared subsequent to reporting period but before the approval of Financial statements (AS-4).</td>
</tr>
<tr>
<td>Cost of major repairs and overhaul expenditure on fixed assets</td>
<td>Recognized in carrying amount of the assets (IAS-16).</td>
<td>Expensed off. Only expenses which increases the FEB are to be capitalized. (AS-10).</td>
</tr>
<tr>
<td>Re-evaluation</td>
<td>Re-evaluation (if done) to be updated periodically so that carrying amount does not differ from fair value at the end period. Re-evaluation to be done for entire class of assets (IAS-16).</td>
<td>No specific requirement for re-evaluation. Re-evaluation can be done on systematic basis like for one location leaving aside the assets of other location. (AS-10).</td>
</tr>
<tr>
<td>Change in the method of depreciation</td>
<td>Considered as a change in accounting estimate. To Be Applied prospectively. (IAS-16 and IAS 8).</td>
<td>Considered as change in accounting policy, retrospective computation and excess or deficit is adjusted in same period. Required to be disclosed (AS-6).</td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td>Disclosure to be made in only consolidated financials of the parent Co. (IAS-33).</td>
<td>Disclosure of EPS in both consolidated and separate financials (AS-20).</td>
</tr>
<tr>
<td>Component Accounting</td>
<td>Required each major part of No such requirement (AS-10). PPE with a cost that is significant in relation to total cost, should be depreciated separately (IAS-16).</td>
<td>No such requirement (AS-10).</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>Intangible assets can have indefinite useful life and hence such assets are tested for impairment and not amortized.</td>
<td>There is no concept of indefinite useful life. Assets have definite life (usually 10 years).</td>
</tr>
<tr>
<td>Reporting Currency</td>
<td>Requires the measurement of profit using the functional currency. Entities may, however, present financial statements in a different currency (IAS-21).</td>
<td>Schedule III to the Companies Act, 2013 specifies Indian Rupees as the reporting currency (AS-11).</td>
</tr>
<tr>
<td>Compensation to KMP</td>
<td>Disclosure to be made for total compensation such as short term employee benefits and post employment benefits.</td>
<td>AS-18 does not require the break up of compensation cost.</td>
</tr>
<tr>
<td>Fringe Benefits Tax</td>
<td>Included as part of related expense (fringe benefit) which gives rise to incurrence of the tax.</td>
<td>Disclosed as a separate item after profit before tax on the face of the income statement.</td>
</tr>
</tbody>
</table>
### Uniform Accounting Policies

<table>
<thead>
<tr>
<th>Prepared using uniform accounting policies across all entities in a group. (IAS-27)</th>
<th>Policies may differ due to impracticability. (AS-21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosure of extra ordinary items</td>
<td>Prohibits such disclosure (IAS-1). No such term in IFRS</td>
</tr>
</tbody>
</table>

**LIST OF IAS**

- IAS-1-Presentation of Financial Statements
- IAS-2- Inventories
- IAS-7- Cash Flow Statements
- IAS-8- Accounting Policies, Change in Accounting estimates and Errors
- IAS-10- Events after balance sheet date
- IAS-11- Construction Contracts
- IAS-12- Income Taxes
- IAS-16-Property, Plant and Equipments
- IAS-17- Leases
- IAS-18- Revenue
- IAS-19- Employee Benefits
- IAS-20-Accounting for Govt Grant and Disclosure of Govt. Assistance
- IAS-21- Effect of Changes in Forex Rates
- IAS-23-Borrowing Costs
- IAS-24- Related Party Disclosures
- IAS-26- Accounting and reporting by retirement benefit plans
- IAS-27- Consolidated and Separate Financial Statements
- IAS-28- Investment in Associates
- IAS-29- Financial Reporting in Hyperinflationary Conditions
- IAS-31- Interest in Joint Ventures
- IAS-32- Financial Instruments- Presentation
- IAS-33- Earning Per Share
- IAS-34- Interim Financial Reporting
- IAS-36- Impairment of Assets
- IAS-37- Provisions, Contingent Liabilities and Contingent Assets
- IAS-38- Intangible Assets
IAS-1 – Presentation of Financial Statements

The standard prescribes minimum structure and content, including certain information required on the face of the financial statements. There are four basic financial statements:

- Balance Sheet
- Income Statement
- Cash Flow Statement
- Statement showing changes in equity

The statement shows (a) each item of income and expense, gain or loss, which, as required by other IASC Standards, is recognized directly in equity, and the total of these items, certain foreign currency translation gains and losses and changes in fair values of financial instruments, and (b) net profit or loss for the period. Owners’ investments and withdrawals of capital and other movements in retained earnings and equity capital are shown in the notes.

IAS-2 – Inventories

Inventories should be valued at the lower of cost and net realizable value. Net realizable value is selling price minus cost to complete the inventory to sell it. Cost includes all costs to bring the inventories to their present condition and location. If specific cost is not determinable, the benchmark treatment is used FIFO or weighted average. An allowed alternative is LIFO, but then there should be disclosure of the lower of (i) net realizable value, and (ii) FIFO, weighted average or current cost. The cost of inventory is recognized as an expense in the period in which the related revenue is recognized. If inventory is written down to net realizable value, the write-down is also charged to expense. Any reversal of such a write-down in a later period is credited to income by reducing that period’s cost of goods sold.

IAS-7 – Cash Flow Statements

The cash flow statement is a required basic financial statement. It explains changes in cash, and cash equivalents during a period. Cash equivalents are short-term, highly liquid investments subject to insignificant risk of changes in value. Cash flow statement should classify changes in cash, and cash equivalents into operating, investing, and financial activities.

IAS-8 – Accounting Policies, Changes in Accounting Estimates and Errors

An entity shall select and apply its accounting policies consistently for similar transactions, other events and conditions, unless a Standard or an Interpretation specifically requires or permits categorization of items for which different policies may be appropriate. An entity shall change an accounting policy only if the change (a) is required by a Standard or an Interpretation; or (b) results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity’s financial position, financial performance or cash flows.

IAS-10 – Events After the Balance Sheet Date

An entity shall adjust the amounts recognized in its financial statements to reflect adjusting events after the balance sheet date. Further an entity shall not adjust the amounts recognized in its financial statements to reflect non-adjusting events after the balance sheet. If an entity declares dividends to holders of equity instruments after the balance sheet date, the entity shall not recognize those dividends as a liability at the balance sheet date.
date. An entity shall not prepare its financial statements on a going concern basis if management determines after the balance sheet date either that it intends to liquidate the entity or to cease trading, or it has no realistic alternative but to do so.

**IAS-11 – Construction Contracts**

If the total revenue, past and future costs, and the stage of completion of a contract can be measured or estimated reliably, revenues and costs should be recognized by stage of completion (the "percentage-of-completion method"). The expected losses should be recognized immediately. If the outcome cannot be measured reliably, costs should be expensed, and revenues should be recognized to the extent that costs are recoverable ("cost recovery method").

**IAS-12 – Income Taxes**

It provides among other things:

- Accrue deferred tax liability for nearly all taxable temporary differences.
- Accrue deferred tax asset for nearly all deductible temporary differences, if it is probable a tax benefit would be realized.
- Accrue unused tax losses and tax credits, if it is probable that they would be realized.
- Use tax rates expected at settlement.
- Current and deferred tax assets and liabilities are measured using the tax rate applicable to undistributed profits.
- Non-deductible goodwill: no deferred tax.
- Unremitted earnings of subsidiaries, associates, and joint ventures: Do not accrue tax.
- Capital gains: Accrue tax at expected rate.
- Do not “gross up” government grants or other assets or liabilities whose initial recognition differs from initial tax base.

**IAS-14 – Segment Reporting**

**Basis of Segment Reporting:**

- Public companies must report information along product and service lines and along geographical lines.
- One basis of segmentation is primary, the other is secondary.
- Segment accounting policies the same as consolidated.

**IAS-16 – Property, Plant and Equipment**

The cost of an item of property, plant and equipment should be recognized as an asset if, and only if, (a) it is probable that future economic benefits associated with the item will flow to the entity; and (b) the cost of the item can be measured reliably. An item of property, plant and equipment that qualifies for recognition, as an asset shall be measured at its cost. An entity shall choose either the cost model or the re-evaluation model as its accounting policy and shall apply that policy to an entire class of property, plant and equipment. If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs shall be revalued. If an asset's carrying amount is increased as a result of re-evaluation, the increase shall be credited directly to equity under the heading of re-evaluation surplus. If an asset's carrying amount is
decreased as a result of re-evaluation, the decrease shall be recognized in profit or loss. However, the decrease shall be debited directly to equity under the heading re-evaluation surplus in respect of that asset.

**IAS-17 – Leases**

A lease is classified as a finance lease if it transfers substantially all risks and rewards incidental to ownership. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership. At the commencement of the lease term, lessees shall recognize finance leases as assets and liabilities in their balance sheets at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease. Any initial direct costs of the lessee are added to the amount recognized as an asset. Finance lease gives rise to depreciation expense for depreciable assets as well as finance expense for each accounting period. Lease payments under operating lease shall be recognized as an expense on a straight-line basis over the lease term unless another systematic basis is more representative of the time pattern of the user’s benefit.

**IAS-18 – Revenue**

Revenue should be measured at fair value of consideration received or receivable. Usually this is the inflow of cash. Discounting is needed if the inflow of cash is significantly deferred without interest. If dissimilar goods or services are exchanged (as in barter transactions), revenue is the fair value of the goods or services received or, if this is not reliably measurable, the fair value of the goods or services given up.

Revenue should be recognized when:

- significant risks and rewards of ownership are transferred to the buyer;
- managerial involvement and control have passed;
- the amount of revenue can be measured reliably;
- it is probable that economic benefits will flow to the enterprise; and
- the costs of the transaction (including future costs) can be measured reliably.

**IAS-19 – Employee Benefits**

*Post-Employment Benefits including Pensions*

- Defined Contribution Plans: Contribution of a period should be recognized as expenses.
- Defined Benefits Plans: Current service cost should be recognized as an expense.
- Other Employee Benefits: Includes vacations, holidays, accumulating sick pay, retiree medical and life insurance, etc.

**IAS-20 – Accounting for Government Grants and Disclosure of Government Assistance**

Grants shall not be credited directly to equity. They shall be recognized as income in a way matched with the related costs. Grants related to assets shall be deducted from the cost or treated as deferred income.

**IAS-21 – The Effects of Changes in Foreign Exchange Rates**

A foreign currency transaction shall be recorded, on initial recognition in the functional currency, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. Reporting at subsequent Balance Sheet date shall be: (a) foreign currency monetary items shall be translated using the closing rate; (b) non-monetary items that are measured in terms of historical cost in a foreign currency shall be translated using the exchange rate at the date of the transaction;
and (c) non-monetary items that are measured at a fair value in a foreign currency shall be translated using the exchange rates at the date when the fair value was determined. Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements shall be recognized in profit and loss in the period in which they arise. When a gain or loss on a non-monetary item is recognized directly in equity, any exchange component of that gain or loss shall be recognized directly in equity. Conversely, when a gain or loss on a monetary item is recognized in profit or loss, any exchange component of that gain or loss shall be recognized in profit or loss.

**IAS-23 – Borrowing Costs**

The benchmark treatment is to treat borrowing costs as expenses. The allowed alternative is to capitalize those directly attributable to construction. If capitalized funds are specifically borrowed, the borrowing costs shall be calculated after any investment income on temporary investment of the borrowings. If funds are borrowed generally, a capitalization rate should be used based on the weighted average of borrowing costs for general borrowings outstanding during the period. Borrowing costs capitalized should not exceed those actually incurred. Capitalization begins when expenditures and borrowing costs are being incurred and construction of the asset is in progress. Capitalization suspends if construction is suspended for an extended period, and ends when all activities substantially are complete.

**IAS-24 – Related Party Disclosures**

This standard requires disclosure of related party transactions and outstanding balances in the separate financial statements of a parent, venturer or investor. A party is related to an entity if: (a) directly or indirectly through one or more intermediaries, the party: (i) controls, is controlled by, or is under common control with, the entity which includes parents, subsidiaries and fellow subsidiaries: (ii) has an interest in the entity that gives it significant influence over the entity; or (iii) has joint control over the entity; (b) the party is an associate; (c) the party is a joint venture in which the entity is a venturer; (d) the party is a member of the key management personnel; (e) the party is close member of the family; (f) the party is controlled, jointly controlled or significantly influenced; (g) the party is a post-employment benefit plan for the benefit of employees of the entity.

**IAS-26 – Accounting and Reporting by Retirement Benefit Plans**

The standard applies to accounting and reporting by retirement benefit plans. It establishes separate standards for reporting by defined benefit plans and by contribution plans.

**IAS-27 – Consolidated and Separate Financial Statements**

Consolidated Financial Statements are the financial statements of a group presented as those of a single economic activity. Consolidated financial statements shall include all subsidiaries of the parent. Intragroup balances, transactions, income and expenses shall be eliminated in full. The financial statements of the parent and its subsidiaries used in the preparation of the consolidated financial statements shall be prepared as on the same reporting date. When the reporting dates are different, the subsidiary prepares additional financial statements as on the same date. Consolidated financial statements shall be prepared using uniform accounting policies for like transactions. Minority interests shall be presented in the consolidated balance sheet within equity, separately from the parent shareholders’ equity.

**IAS-28 – Investments in Associates**

An associate is an entity, including an unincorporated entity such as partnership, over which the investor has significant influence and that is neither a subsidiary nor an interest in a joint venture. An investment in an associate shall be accounted for using the equity method with specified exceptions. An investor shall discontinue
the use of equity method from the date that it ceases to have significant influence over an associate. The investor in applying equity method uses the most recent available financial statements of the associate. When the reporting dates of the investor and the associate are different, the associates prepares, for the use of the investor, financial statements as of the same date as the financial statements of the investor. The investor’s financial statements shall be prepared using uniform accounting policies for like transactions and events in similar circumstances.

**IAS-29 – Financial Reporting in Hyperinflationary Economies**

Hyperinflation is indicated if cumulative inflation over three years is 100 per cent or more (among other factors). In such circumstances, financial statements should be presented in a measuring unit that is current at the balance sheet date. Comparative amounts for prior periods are also restated into the measuring unit at the current balance sheet date. Any gain or loss on the net monetary position arising from the restatement of amounts into the measuring unit current at the balance sheet date should be included in net income and separately disclosed.

**IAS-31 – Interests in Joint Ventures**

A Joint Venture is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control. These are of three types:

- Jointly controlled operations: They should be recognized by the venturer by including the assets and liabilities that it controls and the expenses that it incurs, and its share of the income that it earns from the sale of goods or services by the venture.
- Jointly controlled assets: They should be recognized as follows:
  - the share of the jointly controlled assets, shall the classified according to the nature of the assets;
  - all liabilities that are incurred;
  - the share of any liabilities incurred jointly with the other venturers in relation to the joint venture;
  - any income from the sale or use of its share of output of the joint venture;
  - any expenses that it incurred with respect to its interest in the joint venture.
- Jointly controlled entities: They may maintain their own accounting records and prepare and present financial statements in the same way as other entities in conformity with International Financial Reporting Standard.

**IAS-33 – Earnings Per Share**

It is applicable only to public companies. An entity shall calculate basic earnings per share for profit or loss attributable to ordinary equity holders. Basic earning per share shall be calculated by dividing profit or loss attributable to ordinary equity holders by the weighted average number of ordinary shares. An entity shall calculate diluted earnings per share amount for profit or loss attributable to ordinary equity holders of the parent entity and, if presented, profit or loss from continuing operations attributable to those equity holders. For the purpose of calculating diluted earnings per share, an entity shall adjust profit or loss attributable to ordinary equity holders of the parent equity, and the weighted average number of shares outstanding, for the effects of all dilutive potential ordinary shares. Potential ordinary shares shall be treated as dilutive when, and only when, their conversion to ordinary shares would decrease earnings per share or increase loss per share from continuing operations.

An entity shall present on the face of the income statement basic and diluted earnings per share profit or loss
from continuing operations attributable to the ordinary equity holders of the parent entity, and for profit or loss attributable to the ordinary equity holders of the parent entity for the period for each class of ordinary shares that has a different right to share in profit for the period.

**IAS-34 – Interim Financial Reporting**

The Standard defines the minimum content of an interim financial report as a condensed balance sheet, condensed income statement, condensed cash flow statement, condensed statement showing changes in equity, and selected explanatory notes.

Interim financial statements complete or condensed, must cover the following periods:

- a balance sheet at the end of the current interim period, and comparative at the end of the most recent full financial year;
- income statements for the current interim period and cumulative for the current financial year to date, with comparative statements for the comparable interim periods of the immediately preceding financial year;
- a statement of changes in equity cumulatively for the current financial year to date and comparative for the same year-to-date period of the prior year; and
- a cash flow statement cumulatively for the current financial year to date and comparative for the same year-to-date period of the prior financial year.

Enterprises are required to apply the same accounting policies in their interim financial reports as in their latest annual financial statements.

**IAS-36 – Impairment of Assets**

Impairment of assets deals mainly with accounting for impairment of goodwill, intangible assets and property, plant and equipment. The standard includes requirements for identifying an impaired asset, measuring its recoverable amount, recognizing or reversing any resulting impairment loss, and disclosing information on impairment losses or reversals of impairment losses. An impairment loss should be recognized whenever the recoverable amount of an asset is less than its carrying amount.

**IAS-37 – Provisions, Contingent Liabilities and Contingent Assets**

The standard set out three specific applications of these general requirements:

- a provision should not be recognized for future operating losses;
  - a provision should be recognized for an onerous;
  - a provision for restructuring costs should be recognized only when an enterprise has a detailed formal plan for the restructuring, and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan, or announcing its main features to those affected by it.

**IAS-38 – Intangible Assets**

The Standard states that:

- an intangible asset should be recognized, in the financial statements, if, and only if:
  - it is probable that the expected future economic benefits that are attributable to the asset will flow to the enterprise; and
• the cost of the asset can be measured reliably.

• An entity shall assess the probability of expected future economic benefits using reasonable and supportive assumptions that represent management’s best estimate of the set of economic conditions that will exist over the useful life of the asset.

• Internally generated goodwill shall not be recognized as an asset.

• No intangible asset arising from research shall be recognized.

• An intangible asset arising from development shall be recognized subject to specified conditions.

• Expenditure on an intangible item that was initially recognized as an expense shall not be recognized as part of the cost of an intangible asset at a latter date.

• The accounting for an intangible asset is based on its useful life.

• An intangible asset shall be derecognized on disposal, or when no future economic benefits are expected from its use or disposal.

IAS-39 – Financial Instruments: Recognition and Measurement

Under this Standard an entity shall recognize a financial asset or financial liability on the balance sheet when and only when, the entity becomes a party to the contractual provisions of the instrument. An entity shall derecognize a financial asset when, the contractual right to the cash flows from the financial asset expires or it transfers the financial asset. On derecognition of a financial asset in its entirety, the difference between the carrying amount and the sum of (a) the consideration received, and (b) any cumulative gain or loss that had been recognized directly in equity shall be recognized in profit or loss.

When a financial asset or liability is recognized initially, an entity shall measure it at its fair value plus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial assets or financial liability. After initial recognition, an entity shall measure all financial liabilities at amortised cost using the effective interest method.

IAS-40 – Investment Property

Investment property shall be recognized as an asset when it is probable that the future economic benefits that are associated with the investment property will flow to the entity, and the cost of investment property can be measured reliably. An investment property shall be measured initially at its cost. Transaction cost shall also be included in the initial measurement.

For accounting purposes an enterprise must choose either:

• a fair value model: Investment property should be measured at a fair value and changes in a fair value should be recognized in the income statement; or

• a cost model: Investment property should be measured at depreciated cost (minus any accumulated impairment losses).

An investment property shall be derecognized on disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal.

IAS-41 – Agriculture

This standard prescribes the accounting treatment, financial statement presentation and disclosures related to agricultural activity. Biological assets should be measured at their fair value minus estimated point-of-sale costs, except where the fair value cannot be measured reliably. Agricultural produce harvested from an enterprise’s biological assets should be measured at its fair value minus estimated point-of-sale costs at the point of harvest.
If an active market exists for a biological asset or agricultural produce, the quoted price in that market is the appropriate basis for determining the fair value of that asset. If an active market does not exist, an enterprise uses market-determined prices or values when available. A gain or loss arising on initial recognition of biological assets and from the change in the fair value less estimated point-of-sale costs of biological assets should be included in net profit or loss for the period in which it arises. If a government grant related to a biological asset measured at its fair value minus estimated point-of-sale costs is conditional, including where a government grant requires an enterprise not to engage in specified agricultural activity, an enterprise should recognize the government grant as income when the conditions attaching to the government grant are met.

**IFRS-1 – First-time Adoption of International Financial Reporting Standards**

The objective of this IFRS is to ensure that an entity’s first IFRS financial statement and its financial reports for part of the period covered by those financial statements contain high quality information that: (a) is transparent for users and comparable over all periods presented; (b) provides a suitable starting point for accounting under International Financial Reporting Standards; and (c) can be generated at a cost that does not exceed the benefits to users.

An entity shall use the accounting policies in its opening IFRS balance sheet and throughout all periods presented in its first IFRS financial statements. An entity’s estimates under IFRS at the date of transition to IFRS shall be consistent with estimates made for the same date under previous GAAP, unless there is an objective evidence that those estimates were in error. An entity shall explain how the transition from previous GAAP to IFRSs affected its reported financial position, financial performance and cash flows.

**IFRS-2 – Share-based Payment**

Entities often grant shares or share options to employees or other parties. An entity shall recognize the goods or services received or acquired in a share-based payment transaction when it obtains the goods or services if they are rendered. The entity shall recognize a corresponding increase in equity if the goods or services were received in an equity-settled share-based payment transaction, or a liability, if the goods or services were acquired in cash but settled in share-based payment transaction. When the goods or services received or acquired in a share-based payment transaction do not qualify for recognition as assets, they shall be recognized as expenses. For equity settled share based payment transactions, the entity shall measure the goods or services received, and the corresponding increase in equity directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. For cash-settled share-based payment transactions, the entity shall measure the goods or services acquired and the liability incurred at the fair value of the liability. For share-based payment transactions in which the terms of the arrangement provide either the entity or the counterparty with the choice of whether the entity settles the transaction in cash (or other assets) or by issuing equity instruments, the entity shall account for that transaction, or the components of that transaction, as a cash-settled share-based payment transaction if, and to the extent that, the entity has incurred a liability to settle in cash or other assets, or as an equity-settled share-based payment transaction if, and to the extent that, no such liability has been incurred.

**IFRS-3 – Business Combinations**

The objective of this IFRS is to specify the financial reporting by an entity when it undertakes a business combination. The acquirer is the combining entity that obtains control of the other combining entities or businesses. The acquirer shall measure the cost of a business combination as the aggregate of:

- the fair values, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the acquirer, in exchange for control of the acquiree; plus; (b) any costs directly attributable to the business combination.

The acquirer shall at the acquisition date: (a) recognize goodwill acquired in a business combination as an
asset; and (b) initially measure that goodwill at its cost, being the excess of the cost of the business combination over the acquirer’s interest in the net fair value of the identifiable assets, liabilities and contingent liabilities.

**IFRS-4 – Insurance Contracts**

The objective of this IFRS is to specify the financial reporting for insurance contracts by any entity that issues such contracts until the Board completes the second phase of its project on insurance contracts.

An insurer shall assess on each reporting date whether its recognized insurance liabilities are adequate, using current, estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency shall be recognized in profit or loss. An insurer shall disclose information that identifies and explains the amounts in its financial statements arising from insurance contracts. An insurer shall disclose information that helps users to understand the amount, timing and uncertainty of future cash flows from insurance contracts.

**IFRS-5 – Non-current Assets held for Sale and Discontinued Operations**

The objective of this IFRS is to specify the accounting for assets held for sale, and the presentation and disclosure of discontinued operations. An entity shall classify a non-current asset (or disposal group) as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. An entity shall measure a non-current asset (or disposal group) classified as held for sale at an amount lower its carrying amount, and fair value minus costs for sale. An entity shall present and disclose information that enables users of the financial statements to evaluate the financial effects of discontinued operations and disposals of non-current assets (or disposal groups).

**IFRS-6 – Exploration for and Evaluation and Mineral resources**

The object of this IFRS is to specify the financial reporting for the exploration for and evaluation of mineral resources. Exploration and evaluation assets shall be assessed for impairment when facts and circumstances suggest that the carrying amount of an exploration and evaluation asset may exceed its recoverable amount. An entity shall determine an accounting policy for allocating exploration and evaluation assets to cash-generating units or groups of cash-generating units for the purpose of assessing such assets for impairment. An entity shall disclose information that identifies and explains the amounts recognized in its financial statements arising from the exploration for and evaluation of mineral resources.

**IFRS-7 – Financial Instruments: Disclosures**

IFRS 7 deals with the disclosure requirements in relation to all risks arising from financial instruments (with limited exemptions), and applies to any entity that holds financial instruments. The level of disclosure required depends on the extent of the entity’s use of financial instruments and its exposure to financial risk.

**IFRS-8 – Operating Segments**

IFRS 8 applies to the separate or individual financial statements of an entity whose debt or equity instruments are traded in a public market; or that has been filed, or is in the process of filing, its (consolidated) financial statements with a securities commission or other regulatory organization for the purpose of issuing any class of instruments in a public market.

IFRS 8 requires an entity to report financial and descriptive information about its reportable segments. An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.
IFRS-9 – Financial Instruments

An entity shall recognize a financial asset in its statement of financial position when and only when, the entity becomes party to the contractual provisions of the instrument. A financial asset shall be measured at amortized cost when the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows and the contractual terms of the financial asset give rise to specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. A Financial asset shall be measured at fair value unless it is measured at amortized cost.

Road Map for the application of Ind AS by MCA

Phase 1: Mandatory for accounting periods beginning on or after 1 April 2016

A

• Companies whose equity and/or debt securities are listed, or
• Companies who are in the process of listing on any stock exchange in India or outside India, and
• Companies having a net worth of 500 crore INR or more.

B

• Unlisted companies having a net worth of 500 crore INR or more.

C

• Holding, subsidiary, joint venture or associate companies of companies covered in (A) and (B).
• Comparative information required for the period ending 31 March 2016 or thereafter.
• The roadmap does not mention the net worth criteria for holding, subsidiary, joint venture or associate companies covered in (C) above. Accordingly, it appears that even smaller sized companies in this category will get covered in phase 1.

Phase 2: Mandatory for accounting periods beginning on or after 1 April 2017

D

• Companies whose equity and/or debt securities are listed, or
• Companies who are in the process of listing on any stock exchange in India or outside India, and
• Companies having a net worth of less than 500 crore INR.

E

• Unlisted companies having a net worth of 250 crore INR or more but less than 500 crore INR and not covered in any of the other categories.

F

• Holding, subsidiary, joint venture or associate companies of companies covered in (D) and (E)

List of Ind AS

1. Ind AS 101 First-time Adoption of Indian Accounting Standards
2. Ind AS 102 Share based Payment
3. Ind AS 103 Business Combinations
4. Ind AS 104 Insurance Contracts
5. Ind AS 105 Non-current Assets Held for Sale and Discontinued Operations
6. Ind AS 106 Exploration for and Evaluation of Mineral Resources
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9. Ind AS 1 Presentation of Financial Statements
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12. Ind AS 8 Accounting Policies, Changes in Accounting Estimates and Errors
13. Ind AS 10 Events after the Reporting Period
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33. Ind AS 38 Intangible Assets
34. Ind AS 39 Financial Instruments: Recognition and Measurement
35. Ind AS 40 Investment Property
### LESSON ROUND UP

1. Accounting Standards (ASs) are written policy documents issued by expert accounting body or by government or other regulatory body covering the aspects of recognition, measurement, presentation and disclosure of accounting transactions in the financial statements.

2. The objective of general purpose financial reporting is to provide financial information that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.

3. Two important characteristics of financial information relates to relevance and reliability

4. Convergene of varied Accounting Standards with International Financial Reporting Standards (IFRS) has gained worldwide momentum in recent years to ensure uniformity and transparency in reporting standards.

5. India has committed to convergence of its Indian Accounting Standards (Ind AS) with IFRS in a phased manner beginning April 1, 2016.

6. A revised roadmap for implementation of Indian Accounting Standards (Ind AS) finalized by the council of the ICAI (Institute of Chartered Accountants of India) and submitted to MCA (Ministry of Corporate Affairs) for its consideration.

7. (ICAI): The Institute of Chartered Accountants of India

8. (ASB): Accounting Standards Board

9. (IAS): International Accounting Standards


11. (IASC): International Accounting Standards Committee

12. (IFRIC): International Financial reporting Interpretations Committee

13. (IASC):International Accounting Standards Committee

14. (SIC): Standard Interpretations Committee

### SELF TEST QUESTIONS

1. What is the need for Standards?

2. What is the process followed for setting Standards?

3. What are the benefits & limitations of Accounting Standards?

4. What is the need for convergence between Global Standards?

5. What is the DIFFERENCES between IFRS, IGAAP & Ind AS?
Lesson 11
National and International Accounting Authorities

Lesson Outline

- The Institute of Company Secretaries of India (ICSI)
- The Institute of Chartered Accountants of India
- The Institute of Cost Accountants of India
- IFRS Foundation/International Accounting Standards Board (IASB)
- International Public Sector Accounting Standards Board (IPSASB)
- Financial Reporting Council (FRC) (UK)
- European Financial Reporting Advisory Group (EFRAG)
- Financial Accounting Standards Board (FASB)
- American Institute of Certified Public Accountants (AICPA)
- Australian Accounting Standards Board (AASB)
- The Institute of Chartered Accountants in Australia
- Financial Reporting & Assurance Standards Canada
- Canadian Institute of Chartered Accountants (CICA)
- Accounting Standards Board of Japan (ASBJ)
- External Reporting Board (XRB), New Zealand. New Zealand Institute of Chartered Accountants

Lesson Round Up

Self Test Questions

Learning Objectives

After studying this chapter students will come know about the

1. Different Accounting bodies (National and International)
2. Formation and History of Different Accounting bodies
3. Roles and Responsibilities of Accounting Bodies
THE INSTITUTE OF COMPANY SECRETARIES OF INDIA (ICSI)

The Institute of Company Secretaries of India (ICSI) is the only recognized professional body in India to develop and regulate the profession of Company Secretaries in India. It is a premier national professional body set up under an act of Parliament, the Company Secretaries Act, 1980. ICSI functions under the jurisdiction of the Ministry of Corporate Affairs, Government of India. The Institute provides top-quality education to the students Company Secretaries (CS) Course pursuing and provides the best set standards to CS Members. At present, there are more than 50,000 members and about 4,00,000 students on the roll of ICSI.

A Company Secretary held a senior position in a private sector company or public sector organization, normally in the form of a managerial position or above. In large American and Canadian publicly listed corporations, a Company Secretary is typically named a Corporate Secretary or Secretary.

The company secretary is responsible for the efficient administration of a company, particularly with regard to ensuring compliance with statutory and regulatory requirements and for ensuring that decisions of the Board of Directors are implemented.

Despite the name, the role is not clerical or secretarial. The company secretary ensures that an organization complies with relevant legislation and regulation, and keeps board members informed of their legal responsibilities. Company Secretaries are the company’s named representative on legal documents, and it is their responsibility to ensure that the company and its directors operate within the law. It is also their responsibility to register and communicate with shareholders, to ensure that dividends are paid and to maintain company records, such as lists of directors and shareholders, and annual accounts.

THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA

The Institute of Chartered Accountants of India (ICAI) is a statutory body established by an Act of Parliament, viz., the Chartered Accountants Act, 1949 (Act No.XXXXVIII of 1949) for regulating the profession of Chartered Accountancy in the country. The Institute functions under the administrative control of the Ministry of Corporate Affairs, Government of India. The ICAI is the second largest professional body of Chartered Accountants in the world, with a strong tradition of service to the Indian economy in public interest.

The affairs of the ICAI are managed by a Council in accordance with the provisions of the Chartered Accountants Act, 1949 and the Chartered Accountants Regulations, 1988. The Council is constituted of 40 members of whom 32 are elected by the Chartered Accountants and remaining 8 are nominated by the Central Government generally by the Comptroller and Auditor General of India, Securities and Exchange Board of India, Ministry of Corporate Affairs, Ministry of Finance and other stakeholders.

Over a period of time the ICAI has achieved recognition as a premier accounting body not only in the country but also globally for maintaining highest standards in technical and ethical spheres and for sustaining stringent examination and education standards. Since 1949, the profession has grown leaps and bounds in terms of members and student base.

- Regulate the profession of Accountancy
- Education and Examination of Chartered Accountancy Course
- Continuing Professional Education of Members
- Conducting Post Qualification Courses
- Formulation of Accounting Standards
- Prescription of Standard Auditing Procedures
- Laying down Ethical Standards
National and International Accounting Authorities

- Monitoring Quality through Peer Review
- Ensuring Standards of performance of Members
- Exercise Disciplinary Jurisdiction
- Financial Reporting Review
- Input on Policy matters to Government

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

History of the Profession

It was during the early years of World War II that the concept of cost as an independent entity made its beginning in the industrial circles of the world. Due to the prohibitive cost of defense operations, the then governments at war found it difficult to ascertain the price of defence purchases and thus evolved the concept of cost + contracts. This forced the contractors to submit the cost of the work to be undertaken by them, in order to be awarded the contract.

1945 brought the end of the war, and the nations ravaged by the effects of war began large-scale reconstruction of their economies through industrialization. The end of colonialism meant that many nations gained their independence, and this process increased rapidly. The late forties and fifties can really be termed as the golden era of industrialization. The importance of cost accounting as being central to the formation of government policies provided the foundation of the rapid growth of the profession. What began as a mere exercise in estimating the cost later developed into a movement for efficiency and optimum utilization of scarce resources.

The Institute of Cost Accountants of India (erstwhile The Institute of Cost and Works Accountants of India) was first established in 1944 as a registered company under the Companies Act with the object of promoting, regulating and developing the profession of Cost Accountancy.

On 28th May, 1959, the Institute was established by a special act of Parliament, namely, the Cost and Works Accountants Act, 1959 as a statutory professional body for the regulation of the profession of cost and management accountancy.

It has since been continuously contributing to the growth of the industrial and economic climate of the country. The Institute of Cost Accountants of India is the only recognized statutory professional organization and licensing body in India specializing exclusively in Cost and Management Accountancy.

A Cost Accountant is a person who offers to perform or perform services involving the costing or pricing of goods and services or the preparation, verification or certification of cost accounting and related statements

Objectives of the Institute

- To develop the Cost and Management Accountancy function as a powerful tool of management control in all spheres of economic activities.
- To promote and develop the adoption of scientific methods in cost and management accountancy.
- To develop the professional body of members and equip them fully to discharge their functions and fulfill the objectives of the Institute in the context of the developing economy.
- To keep abreast of the latest developments in the cost and management accounting principles and practices, to incorporate such changes are essential for sustained vitality of the industry and other economic activities.
• To exercise supervision on the entrants to the profession and to ensure strict adherence to the best ethical standards by the profession.

• To organize seminars and conferences on subjects of professional interest in different parts of the country for cross-fertilization of ideas for professional growth.

• To carry out research and publication activities covering various economic spheres and the publishing of books and booklets for spreading information of professional interest to members in industrial, education and commercial units in India and abroad.

**IFRS FOUNDATION**

The IFRS Foundation is a not-for-profit international organization responsible for developing a single set of high-quality global accounting standards, known as IFRS Standards.

The mission of the foundation is to develop standards that bring transparency, accountability and efficiency to financial markets around the world. Their work serves the public interest by fostering trust, growth and long-term financial stability in the global economy.

International organizations responsible for the well-being of the global economy support their work, including the G20, the Financial Stability Board and the World Bank.

IFRS Standards are now required in more than 125 jurisdictions, with many others permitting their use.

**The IFRS Foundation’s three-tier structure**

The IFRS Foundation has a three-tier governance structure, based on an independent standard-setting Board of experts (International Accounting Standards Board), governed and overseen by Trustees from around the world (IFRS Foundation Trustees) who in turn are accountable to a monitoring board of public authorities (IFRS Foundation Monitoring Board).

The IFRS Advisory Council provides advice and counsel to the Trustees and the Board, whilst the Board also consults extensively with a range of other standing advisory bodies and consultative groups.

**Trustees of the IFRS Foundation (Trustees)**

The Trustees are responsible for the governance and oversight of the International Accounting Standards Board (Board).

The Trustees are not involved in any technical matters relating to IFRS Standards. This responsibility rests solely with the Board. The Trustees are accountable to the Monitoring Board, a body of publicly accountable market authorities.

Trustees are appointed for a renewable term of three years. Each Trustee is expected to have an understanding of, and be sensitive to, international issues relevant to the success of an international organization responsible for the development of high quality global accounting standards for use in the world’s capital markets and by other users.

Michel Prada was appointed Chairman of the IFRS Foundation Trustees, effective 1 January 2012, and his second term ran until 31 December 2017. He will remain in position until a successor is in his place.

The Trustees’ responsibilities include, the following. But they are not limited to these. They do much more:

• appointing members of the Board, the IFRS Interpretations Committee and the IFRS Advisory Council;

• establishing and amending the operating procedures, consultative arrangements and due process for the Board, the Interpretations Committee and the Advisory Council;
• reviewing annually the strategy of the Board and assessing its effectiveness; and
• ensuring the financing of the IFRS Foundation and annually its budget approving.

In exercising their governance responsibilities, the Trustees may reconsider or amend the Board’s due process or recommend, for example, improvements to the Board’s outreach activities. In addition, the constitution requires the Trustees to undertake a formal, public review of the structure of the IFRS Foundation, its governance arrangements and its effectiveness in fulfilling the organization’s objectives every five years.

The Trustees are accountable to a Monitoring Board of public authorities. Their reports to the Monitoring Board are available on the Trustees’ meeting pages.

### IFRS ADVISORY COUNCIL (ADVISORY COUNCIL)

The Advisory Council is the formal advisory body to the International Accounting Standards Board (the Board-IASB) and the Trustees of the IFRS Foundation. It consists of a wide range of representatives from groups that are affected by and reinterested in the functioning of the Board.

These include investors, financial analysts and other users of financial statements, as well as preparers, academics, auditors, regulators, professional accounting bodies and standard-setters.

43 organizations from across the world are represented on the Advisory Council, with 49 individual members. Three additional organizations are official observers. Members of the Advisory Council are appointed by the Trustees.

The Advisory Council meets at least two times a year for a period of two days, in London. The Chairman of the Board, the Director of Technical Activities, the Director of Research, the Director of Implementation Activities, Board members and staff who are responsible for the items on the Advisory Council meeting agenda are normally required to attend the meetings.

IASB staff normally provides an update for the Advisory Council, and invite questions and comments from Council members. Depending on the issue, the Chairman of the meeting may call for a formal poll to demonstrate to the Board the extent of support within the Advisory Council for a particular point of view.

The Board consults the IFRS Advisory Council on its:

• technical agenda;
• project priorities;
• project issues related to application and implementation of IFRS Standards; and
• possible benefits and costs of particular proposals.

The Advisory Council also provides advice on single projects with a particular emphasis on practical application and implementation issues, including matters relating to existing standards that may warrant consideration by the IFRS Interpretations Committee.

The Advisory Council serves as a sounding board for the Board, and can be used to gather views that supplement the normal consultative process.

If the Board ultimately takes a position on a particular issue that differs from a polled expression of the Advisory Council, it gives the Advisory Council its reasons for coming to a different position.

### INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARDS BOARD (IPSASB)

The IPSASB develops accounting standards and guidance for use by public sector entities. The structures and processes that support the operations of the IPSASB are facilitated by IFAC.
The IPSASB receives support (financial direct and in kind too) from, the Asian Development Bank, the Chartered Professional Accountants of Canada, the South African Accounting Standards Board, and the Governments of Canada, New Zealand, and Switzerland.

The IPSASB’s forward strategy from 2015 has a single strategic objective:

Strengthening public financial management and public knowledge globally through increasing adoption of accrual-based International Public Sector Accounting Standards™ (IPSAS™) by:

1. Developing high quality public sector financial reporting standards;
2. Developing other publications for the public sector; and
3. Raising awareness of the IPSASs and the benefits of their adoption.

The IPSASB follows a very structured and public educating process in the development of all IPSASs. This process provides the opportunity for all those interested in financial reporting in the public sector, including those preparers and users directly affected by the IPSASs to make their views known to the IPSASB, and ensure that their views are considered in the standard-setting development process.

- Exposure Drafts (ED) of all proposed IPSASs are developed, usually with the input of a task force or project advisory panel, and are available for download from the website. Exposure drafts are sometimes preceded by a Consultation Paper that explores the subject in detail and provides the basis for further discussions, development, and policy formation. All Exposure Drafts have open and finite comment periods.

- Comments received as a result of the exposure draft process are considered by IPSASB members, and are publicly available on the IPSASB website. If changes to the ED are made after analysis and discussion of the responses, the IPSASB considers re-exposing the document for further review and comments.

- Approval of exposure drafts, re-exposure drafts, and IPSASs are made by the affirmative vote of at least by a majority of two-third of the IPSASB members.

Since 1997, the IPSASB has developed and issued a suite of 38 accrual standards (four of which have been, or are in the process of being, withdrawn), three recommended practice guidelines, which provide guidance on the broader areas of financial reporting outside the financial statements, and a cash basis standard for countries moving toward full accrual accounting. In October 2014 the IPSASB issued the first global conceptual framework for public sector entities. This underpins IPSASB’s standard-setting and guidance development activities.

Governments that function on a cash basis do not account for significant liabilities, such as employee pensions and loans, and assets such as property, plant and equipment and investments. The IPSASB encourages public sector entities to adopt the accrual basis of accounting which will improve financial management and increase transparency resulting in a more comprehensive and accurate view of a government’s financial position. Many governments, jurisdictions, and international institutions have already adopted IPSASs – many more are on the road to convergence.

In 2015 following the report of the IPSASB Governance Review Group, the Public Interest Committee (PIC) was established. The PIC’s remit is to provide assurance that the IPSASB’s standard-setting activities are in the public interest by providing recommendations on:

- The terms of reference of the IPSASB;
- The arrangements for nomination and appointment of IPSAB members; and
- The procedures and processes for formulation of the IPSASB’s strategy and work plan; and development of IPSASs.
Currently it comprises of individuals from the International Monetary Fund, International Organization of Supreme Audit Institutions, Organization for Economic Co-operation and Development, and the World Bank Group. The minutes of the PIC meetings and dates of upcoming meetings are available to the public.

**FINANCIAL REPORTING COUNCIL (FRC) (UK)**

The FRC is a company limited by guarantee, partly funded by government and partly by the industry; its Board of Directors is appointed by the Secretary of State for Business, Innovation and Skills. The FRS and its subsidiaries play crucial roles in the oversight and development of corporate governance standards in the UK and the Republic of Ireland, such as the UK Corporate Governance Code and standards for the accounting industry.

The FRC board is supported by three committees:

- the Codes & Standards Committee
- the Executive Committee
- the Conduct Committee

The Codes and Standards Committee advise the FRC board on matters relating to codes, standard-setting and policy questions through its Accounting, Actuarial and Audit & Assurance Councils (formerly Audit Practices Board). The Conduct Committee advises the FRC Board in matters relating to conduct activities to promote high quality corporate reporting, including monitoring, oversight, investigative and disciplinary functions, through its Monitoring Committee and Case Management Committee. The Executive Committee will support the Board by advising on strategic issues and providing day-to-day oversight of the work of the FRC.

The FRC incorporates six operating bodies:

**Accounting Standards Board**

The role of the Accounting Standards Board (ASB) is to issue accounting standards in the United Kingdom. It is recognized for that purpose under the Companies Act 1985. It took over the task of setting accounting standards from the Accounting Standards Committee (ASC) in 1990. However, ASB was overtaken by Financial Reporting Council (FRC) on 2 July 2012. Thus, FRC is now the authority that may issue accounting standards in the UK.

**FINANCIAL REPORTING REVIEW PANEL (FRRP)**

The Financial Reporting Review Panel was established in 1990 as a subsidiary of the United Kingdom's Financial Reporting Council. The FRRP seeks to ensure that the provision of financial information by public and large private companies complies with relevant accounting requirements such as the Companies Act 1985.

**ACCOUNTANCY & ACTUARIAL DISCIPLINE BOARD (AADB)**

The Accountancy & Actuarial Discipline Board is an independent, investigative and a disciplinary body for accountants and actuaries in the United Kingdom. The AADB was formerly known as the Accountancy Investigation & Discipline Board (AIDB). It changed its name to the AADB on August 16, 2007. The AADB Scheme establishes the framework and sets in place the legal formalities of participation between the AADB and the Participating Accountancy Bodies i.e., the Institute of Chartered Accountants in England and Wales (ICAEW), the Association of Chartered Certified Accountants (ACCA), the Chartered Institute of Management Accountants (CIMA), and the Chartered Institute of Public Finance and Accountancy (CIPFA), The Institute of Chartered Accountants of Ireland, and the Institute of Chartered Accountants of Scotland.

As of 2010 the AADB has a substantial workload including investigations into the conduct of professional firms, such as EY, that had advised Lehman Brothers, JPMorgan, Connaught, Aero Inventory, and BAE.
PROFESSIONAL OVERSIGHT BOARD (POB)

The Professional Oversight Board (POB) is a UK regulatory body specializing in accounting, auditing, and actuarial professions. It is a part of the Financial Reporting Council (FRC), the independent regulator of corporate governance and reporting in the UK. The Board’s stated purpose is to support the FRC’s goal of investor and public confidence in the financial governance of business organizations. The Board provides assurance that professional accountancy bodies are properly setting standards and enforcing discipline for their members, in accordance with the Companies Act, 2006 and other statutory requirements. The POB can carry out inspections on behalf of the FRC, but if any shortcomings are found, sanctions can only be imposed by the professional bodies. However, if a complaint raises concerns that a professional accountancy or actuarial body may have breached significantly its own standard procedures in the handling of a complaint about their member, the POB will normally seek the comments of the relevant body and look at papers relating to the case, as appropriate. The Board will then normally write to the complainant to tell them the outcome of their consideration of the matter stating whether the body proposes to take any action based on their comments. The POB does not have the power either to overturn any decision which the body has taken in a case or to direct how the body should handle a case.

The Board also operates an Audit Inspection Unit (AIU) which oversees auditing organizations and makes recommendations for appropriate regulatory actions by governmental and professional authorities. As part of its oversight of the actuarial profession, the Board monitors the activities of actuarial organizations with regard to education, discipline, ethical standards and continuing professional development of their members. The Board also seeks to provide a framework for the evaluation of the quality and effectiveness of actuarial work.

Before 5 May 2006, the Board was known as the Professional Oversight Board for Accountancy. The name change reflected the Board’s additional responsibility for oversight of the actuarial profession from that date.

In 2011, the Board published information for the first time about shortcomings in self-regulation by particular institutes. Press reports highlighted comments about ACCA, which had implemented recommendations to improve its examination syllabus, but needed to pay greater attention to continuing monitoring of members who had registered as auditors some years ago.

The Board contains members from a wide range of backgrounds. As of 2011 Paul George is its Director, and John Kellas is Interim Chair following the death of Dame Barbara Mills.

AUDITING PRACTICES BOARD (APB)

The Auditing Practices Board Limited (APB) was originally established in 1991 as a committee of the Consultative Committee of Accountancy Bodies to take responsibility within both Ireland and the United Kingdom for setting standards of auditing with the objective of enhancing public confidence in the audit process and the quality and relevance of audit services in the public interest. In 2002 APB was re-established under the auspices of The Accountancy Foundation and, following a UK government review, it has been transferred to the Financial Reporting Council (FRC). Its objective has remained the same, but its remit has been extended to include responsibility for setting standards for auditors’ integrity, objectivity and independence.

EUROPEAN FINANCIAL REPORTING ADVISORY GROUP (EFRAG)

The European Financial Reporting Advisory Group (EFRAG) is a private association established in 2001 with the encouragement of the European Commission to serve the public interest. Its Member Organizations are European stakeholders and National Organizations have acknowledge of and take interest in the development of IFRS and how they contribute to the efficiency of capital markets.

EFRAG’s mission is to serve the European public interest by developing and promoting European views in the field of financial reporting and ensuring these views are properly considered in the IASB standard-setting process and in related international debates. EFRAG ultimately provides advice to the European Commission.
on whether newly issued or revised IFRS meet the criteria in the IAS Regulation for endorsement for use in the EU, including whether endorsement would be conducive to the European public good.

EFRAG is a member of the European delegation to the IASB Accounting Standards Advisory Forum (ASAF), a member of the International Forum of Accounting Standard Setters (IFASS), and has bilateral relationships with regional or national groups interested and involved in IFRS development. EFRAG also participates in the World Standard Setters meetings. The EFRAG Board President is a member of the IFRS Advisory Council. Whilst EFRAG’s draft comment letters are published as a basis for EFRAG’s due process in Europe. It is widely acknowledged that they attract interest way beyond Europe.

EFRAG seeks input from all stakeholders, and obtains evidence about specific European circumstances throughout the standard-setting process and in providing our endorsement advice. Our legitimacy is built on transparency, governance, due process which may include field tests, impact analyses and outreaches, public accountability and leadership. This enables EFRAG to speak convincingly, clearly and consistently, and be recognized as the European Voice in financial reporting.

**Role of the EFRAG General Assembly**

Alongside fulfilling the legal requirements under the Belgian law for international associations and deciding over the statutes, internal rules and membership of EFRAG, the EFRAG General Assembly is in charge of:

- Approving the financial statements and the budget of next year;
- Appointing the President, Vice-President and members of the Board. The President of the Board is nominated by the European Commission after having heard the Council of the European Union and the European Parliament;
- Exercising general oversight over the Board, whilst respecting the Board’s exclusive responsibility for the positions taken on all financial reporting matters.

**FINANCIAL ACCOUNTING STANDARDS BOARD (FASB)**

The Financial Accounting Standards Board (FASB) is a private, non-profit organization, standard a setting body whose primary purpose is to establish and improve Generally Accepted Accounting Principles (GAAP) in the public’s interest within the United States. The Securities and Exchange Commission (SEC) designated the FASB as the organization responsible for setting accounting standards for public companies in the U.S. The FASB replaced the American Institute of Certified Public Accountants’ (AICPA) Accounting Principles Board (APB) on July 1, 1973.

The FASB’s mission is “to establish and improve standards of financial accounting and reporting that foster financial reporting by non-governmental entities that provides decision-useful information to investors and other users of financial reports.”

The FASB accomplishes its mission “through a comprehensive and independent process that encourages broad participation, objectively considers all stakeholder views, and is subject to oversight by the Financial Accounting Foundation’s Board of Trustees.”

In 1973 the FASB began their Conceptual Framework project to develop a sound theoretical basis for the development of accounting standards in the United States.

In 1984, the FASB formed the Emerging Issues Task Force (EITF). This group was formed in order to provide timely responses to financial issues as they emerged. This group includes 15 people from both the private and public sectors coupled with representatives from the FASB and an SEC observer. As issues emerge, the task force considers them and tries to reach a consensus on what course of action to take. If consensus can be reached, they issue an EITF issue and FASB doesn’t get involved. An EITF issue is considered just as valid
as a FASB pronouncement and is included in the GAAP. On September 18, 2002 in Norwalk, Connecticut the FASB met with the International Accounting Standards Board (IASB) and together issued a Memorandum of Understanding on a convergence project. Regarding International Financial Reporting Standards (IFRS) outlining plans to converge IFRS and US GAAP into in the “development of the highest quality compatible accounting standards that could be used for both domestic and cross-border financial reporting.” As part of the project, the FASB began to move away from the principle of historical cost to fair value.

The FASB is subject to oversight by the Financial Accounting Foundation (FAF), which selects the members of the FASB and the Governmental Accounting Standards Board, and funds both organizations.

The Board of Trustees of the FAF, in turn, is selected in part by a group of organizations including:

- American Accounting Association
- American Institute Of Certified Public Accountants
- CFA Institute
- Financial Executives International
- Government Finance Officers Association
- Institute of Management Accountants
- National Association of State Auditors, Comptrollers and Treasurers
- Securities Industry Association

The FASB and the International Accounting Standards Board created the Financial Crisis Advisory Group in 2008— an international group as standard-setting bodies—which coordinated responses “on the future of global standards in light of” the financial crisis of 2007–2010. The FCAG was composed of 15–20 senior leaders in finance and chaired by Harvey Goldschmid and Hans Hoogervorst with a mandate to investigate financial reporting issues uncovered by the global financial crisis. FCAG members included Stephen Haddrill and Michel Prada—a member of the International Centre for Financial Regulation (ICFR) and co-chair of the Council on Global Financial Regulation was a member of the Financial Crisis Advisory Group. Haddrill, who was the only UK representative on the FCAG, is CEO of the Financial Reporting Council (FRC) in the United Kingdom and has a close interest in accounting standards.

**AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS (AICPA)**

Founded in 1887, the American Institute of Certified Public Accountants (AICPA) is the national professional organization of Certified Public Accountants (CPAs) in the United States, with more than 418,000 members in 143 countries who represent business and industry, public practice, government, education, student affiliates and international associates. It sets ethical standards for the profession and U.S. auditing standards for audits of private companies, non-profit organizations, federal, state and local governments. It also develops and grades the Uniform CPA Examination.

**History**

The AICPA and its predecessors date back to 1887 when the American Association of Public Accountants (AAPA) was formed. In 1916, the American Association of Public Accountants was succeeded by the Institute of Public Accountants, at which time there was a membership of 1,150. The name was changed to the American Institute of Accountants in 1917 and remained so until 1957, when it changed to its current name of the American Institute of Certified Public Accountants. The American Society of Certified Public Accountants was formed in 1921 and acted as a federation of state societies. The Society was merged into the Institute in 1936 and, at that time, the Institute agreed to restrict its future members to CPAs why.
In January 2012, the AICPA entered into a joint venture with the Chartered Institute of Management Accountants (CIMA), a partnership that produced the Chartered Global Management Accountant (CGMA) designation. In 2014, the AICPA and the CIMA cocreated the Global Management Accounting Principles (GMAPs). These principles were, the result of research conducted in across 20 countries over five continents, aim to guide best practices in the discipline of management accounting.

In June 2016, members of both the AICPA and CIMA approved evolving the joint venture through the creation of a new international association. The Association of International Certified Professional Accountants launched in 2017, bringing together the expertise and capabilities of the AICPA and CIMA to strengthen the entire accounting profession – both public and management accounting – through stronger advocacy, enhanced membership resources and a broader platform to reach the next generation. The AICPA and CIMA membership bodies remain and provide all existing benefits to members.

AUSTRALIAN ACCOUNTING STANDARDS BOARD (AASB)

The Australian Accounting Standards Board (AASB) is an Australian Government agency that develops and maintains financial reporting standards applicable to entities in the private and public sectors of the Australian economy. Also, the AASB contributes to the development of global financial reporting standards and facilitates the participation of the Australian community in global standard-setting. The AASB’s functions and its powers are set out in the Australian Securities and Investments Commission Act 2001. The Australian Securities and Investments Commission’s (ASIC’s) role is to enforce and regulate company and financial services’ laws to protect Australian consumers, investors and creditors. The AASB uses a conceptual framework to develop and evaluate accounting standards.

The AASB makes Australian Accounting Standards, including Interpretations, to be applied by:

(a) entities required by the Corporations Act 2001 to prepare financial reports;

(b) governments in preparing financial statements for the whole of government and the General Government Sector (GGS); and

(c) entities in the private or public for-profit or not-for-profit sectors that are reporting entities or that prepare general purpose financial statements.

AASB 1053 Application of Tiers of Australian Accounting Standards establishes a differential reporting framework consisting of two tiers of reporting requirements for preparing general purpose financial statements:

(a) **Tier 1**: Australian Accounting Standards; and

(b) **Tier 2**: Australian Accounting Standards – Reduced Disclosure Requirements.

Tier 1 requirements incorporate International Financial Reporting Standards (IFRSs), including Interpretations, issued by the International Accounting Standards Board (IASB), with the addition of paragraphs on the applicability of each Standard in the Australian environment.

Publicly accountable (defined in AASB 1053) for-profit private sector entities are required to adopt Tier 1 requirements, and therefore are required to comply with IFRSs. Furthermore, other for-profit private sector entities complying with Tier 1 requirements will simultaneously comply with IFRSs. Some other entities complying with Tier 1 requirements will also simultaneously comply with IFRSs.

Tier 2 Requirements comprise the recognition, measurement and presentation requirements of Tier 1, but substantially reduced disclosure requirements in comparison with Tier 1. Australian Accounting Standards also include requirements that are specific to Australian entities. These requirements may be located in Australian Accounting Standards that incorporate IFRSs or in other Australian Accounting Standards. In most instances, these requirements are either restricted to the not-for-profit or public sectors, or include additional disclosures that address domestic, regulatory or other issues. These requirements do not prevent publicly accountable for-
profit private sector entities from complying with IFRSs. In developing requirements for public sector entities, the AASB considers the requirements of International Public Sector Accounting Standards (IPSASs), as issued by the International Public Sector Accounting Standards Board (IPSASB) of the International Federation of Accountants.

**AASB Board**

The Board comprises 11 members including the Chair. The Chair is appointed by the Minister for Superannuation and Corporate Law, and members, from a variety of backgrounds, are appointed by the Financial Reporting Council (FRC).

The AASB is committed to developing, in the public interest, a single set of high quality, understandable accounting standards that require transparent and comparable information in general purpose financial statements.

**The Minister**

The Minister appoints the Chairperson of the AASB. The Chairperson of the AASB is accountable to the Minister regarding the operations of the AASB and the Office of the AASB.

**Financial Reporting Council (FRC)**

Responsible to the Minister, the FRC provides broad strategic direction and advice to the AASB and has oversight of the process for setting accounting Standards in Australia.

The FRC appoints Board members to the AASB for various terms.

**AUSTRALIAN ACCOUNTING STANDARDS BOARD (AASB)**

The AASB is an independent agency of the Australian Government with responsibility to make Accounting Standards under Section 334 of the Corporations Act to formulate accounting standards for other purposes and to participate in and contribute to the development of a single set of international accounting standards for worldwide use.

The Chair of the AASB reports to the Minister regarding the organization’s operations.

**Office of the Australian Accounting Standards Board (AASB)**

The Office of the AASB provides technical and administrative services, information and advice to the AASB. Responsible to the Minister for financial management of the Office of the AASB, the Chairman of the AASB is also the Chief Executive Officer of the Office.

**THE INSTITUTE OF CHARTERED ACCOUNTANTS IN AUSTRALIA**

The Institute of Chartered Accountants in Australia (the Institute) was the professional accounting body representing Chartered Accountants in Australia. It had over 61,000 members and some 12,000 students. It was one of three major legally recognized Professional Accountancy bodies in Australia. The others being CPA Australia and Institute of Public Accountants. It is a founding member of the Global Accounting Alliance (GAA). Members of the Institute are part of the international accounting coalition of the world’s premier accounting bodies, the GAA. Chartered Accountants audit 100 per cent of the Top ASX-listed companies in Australia.

In November 2013 Members of The Institute of Chartered Accountants in Australia and the New Zealand Institute of Chartered Accountants voted yes on a proposal to create One New Institute: “Chartered Accountants Australia and New Zealand”.

New Zealand Institute of Chartered Accountants and the Institute of Chartered Accountants in Australia (ICAA) amalgamated to become Chartered Accountants Australia and New Zealand.
The Corporation of Accountants of Australia was granted the official coat of arms by the College of Arms in 1905. In 1906, the Corporation of Accountants of Australia and the Sydney Institute of Public Accountants moved to create a national accounting body of all practising public accountants in Australia.

In 1907, negotiations between the Corporation of Accountants of Australia, the Sydney Institute of Public Accountants and the Institutes in Melbourne, resulted in the formation of the Australasian Corporation of Public Accountants (ACPA) on June 14. The ACPA membership was composed exclusively of practising public accountants.

The Institute of Chartered Accountants in Australia (ICAA) was formed with the granting of a Royal Charter on 19 June 1928, to Thomas Brentnall, George Mason Allard and Henry Joshua Wise on behalf of the public accountants of Australia. The ICAA was the first accounting body outside the United Kingdom to receive a Royal Charter.

On 26 October 1929 The Earl Marshal of England granted the current arms to the Institute. The arms include the Latin motto ‘Nec Timens Nec Favens’ which translates to ‘Without Fear or Favour’.

The Institute now operates under a Supplemental Royal Charter (amended from time to time) granted by the Governor-General on behalf of Queen Elizabeth II on 19 August 2005.

After voting on the merger with the New Zealand Institute of Chartered Accountants the bodies formed Chartered Accountants Australia and New Zealand 31 December 2014.

Canada’s financial reporting and assurance standards boards and oversight councils comprise the Accounting Standards Oversight Council, Accounting Standards Board, Public Sector Accounting Board, Auditing and Assurance Standards Oversight Council, and Auditing and Assurance Standards Board.

- The boards establish and maintain standards on accounting and auditing to serve the public interest.
- The oversight councils appoint board members and oversee and provide input into the boards’ activities, ensuring that the process for setting Standards functions as it should.

Members of the boards and oversight councils are mainly volunteers and represent a wide range of individuals with various backgrounds from both the private and public sectors, such as financial statement preparers and users, auditors, academics and regulators.

- The diverse makeup of the boards and oversight councils’ volunteer members ensures that differing viewpoints are considered when developing standards.
- This enables the boards and oversight councils to serve the public interest through a process free of undue influence from specific professions, organizations and other groups.

The Canadian Institute of Chartered Accountants was incorporated by an Act of the Parliament of Canada in
1902, which later became known as the Canadian Institute of Chartered Accountants Act.

The CICA developed and supported accounting, auditing and assurance standards for organizations in Canada, developed and delivered education programs, and issued the professional designation of Chartered Accountant. The CICA was a founding member of the International Federation of Accountants and the Global Accounting Alliance.

A non-profit organization for accounting professionals in Canada. CICA has developed GAAP (generally accepted accounting principles) for Canadian accounting, and publishes guidance and educational materials on a number of accounting-related topics. It is one of the founding members of the International Federation of Accountants (IFAC) and the Global Accounting Alliance (GAA).

Founded in 1902, the CICA has grown to become the primary professional organization for Chartered Accountants in Canada. The institution was originally known as the Dominion Association of Chartered Accountants. As of 2010, the CICA boasts a membership of approximately 75,000 CAs and around 12,000 students both in Canada and Bermuda.

**ACCOUNTING STANDARDS BOARD OF JAPAN (ASBJ)**

The Financial Accounting Standards Foundation (FASF) a private sector organization to include the Accounting Standards Board (ASB) was established to contribute to the sound development of financial practices in Japan and sound capital markets by making recommendations and contributions to the international accounting system by studying, researching, and developing generally accepted accounting standards, and by studying and researching disclosure system and various other practices pertinent to business finance systems.

To accomplish these objectives, the FASF will implement the following activities:

1. To study, research, and develop generally accepted accounting standards;
2. To study and research disclosure systems, as well as various other practices pertinent to business finance systems;
3. To make recommendations based on the results of activities mentioned in the preceding two items;
4. On a broader level, to help develop and improve international accounting standards; and
5. Other businesses necessary to discharge the objectives of the FASF.

**EXTERNAL REPORTING BOARD (XRB), NEW ZEALAND NEW ZEALAND INSTITUTE OF CHARTERED ACCOUNTANTS:**

Overview of the XRB The External Reporting Board (XRB) is an Independent Crown Entity established under the Financial Reporting Act 1993 and subject to the Crown Entities Act 2004.

The XRB came into existence on 1 July 2011 when amendments to the Financial Reporting Act 1993 came into force. The XRB was reconstituted from the Accounting Standards Review Board.

The functions of the XRB are prescribed by the Financial Reporting Act 1993 and comprise:

- developing and implementing an overall strategy for financial reporting standards
- and auditing and assurance standards (including developing and implementing tiers of financial reporting and assurance); preparing and issuing accounting standards;
- preparing and issuing auditing and assurance standards, including the professional
- and ethical standards that will govern the professional conduct of auditors; and liaising with national and international organizations that exercise functions that
Lesson 11  National and International Accounting Authorities

- correspond with, or are similar to, those conferred on the XRB.

The Board itself comprises nine members appointed by the Governor General on the recommendation of the responsible Minister.

The Board has established two standard setting boards, one that has responsibility for accounting standard setting (the New Zealand Accounting Standards Board) and the other with responsibility for auditing and assurance standard setting (the New Zealand Auditing and Assurance Standards Board). This structure is designed to not only ensure that the technical resources are available and that standard-setting is undertaken in accordance with best practice, but also to enhance functional equivalence with Australia.

In the period since early 2009, the XRB and its predecessor the Accounting Standards Review Board has been developing a new Accounting Standards Framework. This involved an extensive consultation process and culminated in the preparation of a document entitled “Proposals for the New Zealand Accounting Standards Framework”. In accordance with the requirements of the Financial Reporting Act 1993, this document was submitted to, and approved by, the Minister of Commerce in April 2012.

The second key strategic driver will be the enhancement of auditing and assurance standards. The XRB assumed responsibility for setting auditing and assurance standards from 1 July 2011. A key strategic priority is to further develop the inherited suite of standards so that they are converged with international standards, and harmonised with Australian auditing and assurance standards.

LESSON ROUND UP

1. The Institute of Company Secretaries of India (ICSI)
2. The Institute of Chartered Accountants of India
3. The Institute of Cost Accountants of India
4. IFRS Foundation/International Accounting StandardsBoard (IASB)
5. International Public Sector Accounting Standards Board (IPSASB)
6. Financial Reporting Council (FRC) (UK)
7. European Financial Reporting Advisory Group (EFRAG)
8. Financial Accounting Standards Board (FASB)
9. American Institute of Certified Public Accountants (AICPA)
10. Australian Accounting Standards Board (AASB)
11. The Institute of Chartered Accountants in Australia (ICAA)
12. Financial Reporting & Assurance Standards Canada (FRASC)
13. Canadian Institute of Chartered Accountants (CICA)
14. Accounting Standards Board of Japan (ASBJ)

SELF TEST QUESTIONS

State the roles performed by:

1. The Institute of Company Secretaries of India (ICSI)
2. The Institute of Chartered Accountants of India
3. The Institute of Cost Accountants of India
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<td>IFRS Foundation/International Accounting Standards Board (IASB)</td>
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Lesson 12

ADOPTION, CONVERGENCE AND INTERPRETATION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) AND ACCOUNTING STANDARDS IN INDIA

LESSON OUTLINE

- Calculation of Qualifying Net Worth of Companies
- Details of Ind AS
- Comparison of Indian GAAP, IFRS and Ind AS
- Comparison of Ind AS with IFRS (International Accounting Standards)
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

After studying this chapter, you should be able to:

- Understand the importance of relevance and reliability characteristics of financial information
- Discuss the need for quality, understandable and enforceable global accounting standards
- Discuss the roadmap for convergence of Indian Accounting Standards with IFRS
- Understand the major difference between Indian GAAP, IFRS and converged Indian Accounting Standards (Ind AS)
INTRODUCTION

According to International Accounting Standard Board (IASB) conceptual framework, the objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to their entitle. Consequently, the two important characteristics of financial information that emanates from the above objective relates to relevance and reliability. According to IASB Framework for the Preparation and Presentation of Financial Statement, information is deemed to be relevant when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming or correcting, their past evaluations. Similarly to be reliable, information must represent faithfully the transactions and other events, it either purports to represent or could reasonably be expected to represent.

However, given the different social, regulatory and accounting structures across different countries, there is a lacuna in terms of absence of a single set of high quality, understandable and enforceable global accounting standards available to investors for comparison of financial statements of companies around the world. Consequently, convergence of varied accounting standards with international financial reporting standards (IFRS) has gained worldwide momentum in recent years as it would increase uniformity and transparency in reporting standards.

India, being one the important emerging countries has also committed to convergence of its Indian Accounting Standards (Indian GAAP) with IFRS in a phased manner. While the initial roadmap was to achieve convergence in three phases starting April 2011 and ending April 2014, it could not be implemented due to various reasons. A revised roadmap for implementation of Indian Accounting Standards (Ind AS) finalized by the council of the ICAI (Institute of Chartered Accountants of Indian), at its last meeting, held on 20-22nd March, 2014 (wide its press release on 24th March 2014) has been submitted to the Ministry of Corporate Affairs (MCA) for its consideration. As stated in earlier roadmaps for achieving convergence, there shall be two separate sets of Accounting Standards notified under the Companies Act, 1956. First set would comprise the Indian Accounting Standards (Ist AS) converged with the IFRSs which shall be applicable for preparation of consolidated financial statements as defined in the Companies Act 2013, of the specified class of companies. The second set would comprise the existing notified Accounting Standards (AS) and shall be applicable for preparation of individual financial statements of the companies preparing consolidated financial statement as per IndAS and for financial statement of other companies.

As per the roadmap, the first set of Accounting Standards, i.e., converged Indian Accounting Standards (Ind AS) shall be applied to the following specified class of companies for preparing their first Indian Accounting Standards (Ind AS) consolidated financial statements for the accounting period beginning on or after 1st April, 2016, with comparatives for the year ending 31st March 2016 or thereafter:

(a) Whose equity and/or debt securities are listed or are in the process of listing on any stock exchange in India or outside India;

(b) Companies other than those covered in (a) above, having net worth of INR 500 crore or more; or

(c) Holding, subsidiary, joint venture or associate companies of companies covered under (a) or (b) above.

Further, companies to which Indian Accounting Standards (Ind AS) are applicable shall prepare their first set of consolidated financial statements in accordance with the Indian Accounting Standards (Ind AS) effective at the end of its first Ind AS reporting period unless otherwise specified, i.e., companies preparing consolidated financial statements for the accounting period beginning on or after 1st April 2016 shall be required to apply the Ind AS effective for financial year ending on 31st March 2017.

Calculation of Qualifying Net Worth of Companies

For the purpose of calculation of qualifying net worth of companies, the following rules shall apply:

1. Whose equity and/or debt securities are listed or are in the process of listing on any stock exchange in India or outside India;
2. Companies other than those covered in (1) above, having net worth of INR 500 crore or more; or
3. Holding, subsidiary, joint venture or associate companies of companies covered under (1) or (2) above.

Further, companies to which Indian Accounting Standards (Ind AS) are applicable shall prepare their first set of consolidated financial statements in accordance with the Indian Accounting Standards (Ind AS) effective at the end of its first Ind AS reporting period unless otherwise specified, i.e., companies preparing consolidated financial statements for the accounting period beginning on or after 1st April 2016 shall be required to apply the Ind AS effective for financial year ending on 31st March 2017.
(a) The net worth shall be calculated as per the standalone audited balance sheet of the company falling under any of the categories mentioned above as on 31st March 2014, or the first balance sheet for accounting period which ends after the date.

(b) The net worth shall be calculated as the paid up share capital a plus reserves and surplus less revaluation reserve.

(c) For companies which are not in existence on 31st March, 2014, or an existing company meets the criteria for the first time after 31st March 2014, the net worth shall be calculated on the basis of the first balance sheet ending after that date.

**Voluntary Adoption**

(a) Companies not mandatorily required to follow Indian Accounting Standards (Ind AS) shall have the option to apply the Indian Accounting Standards (Ind AS) voluntarily for their consolidated financial statements provided they prepare consolidated financial statement under the Indian Accounting Standards (Ind AS) consistently thereafter.

(b) The option to apply the Indian Accounting Standards (Ind AS) voluntarily. Once exercised, therefore, shall be irrevocable. Such companies would not be required to prepare another consolidated financial statement in accordance with existing Accounting Standards (Ind AS).

**Details of Ind AS**

1. **Ind AS 101 First-time Adoption of Indian Accounting Standards**

The objective of this Indian Accounting Standard (Ind AS) is to ensure that an entity’s first Ind-AS financial statements, and its interim financial reports for part of the period covered by those financial statements, contain high quality information that:

(a) is transparent for users and comparable over all periods presented;

(b) provides a suitable starting point for accounting in accordance with Ind-ASs; and

(c) can be generated at a cost that does not exceed the benefits.

An entity shall apply this Ind-AS in:

(a) its first Ind-AS financial statements, and

(b) each interim financial report, if any, that it presents in accordance with Ind AS 34 Interim Financial Reporting for part of the period covered by its first Ind-AS financial statements.

2. **Ind AS 102 Share-based Payment**

The objective of this Standard is to specify the financial reporting by an entity when it undertakes a share-based payment transaction. In particular, it requires an entity to reflect in its profit or loss and financial position the effects of share-based payment transactions, including expenses associated with transactions in which share options are granted to employees.

An entity shall apply this Standard in accounting for all share-based payment transactions, whether or not the entity can identify specifically some or all of the goods or services received, including:

(a) equity-settled share-based payment transactions,

(b) cash-settled share-based payment transactions, and

(c) transactions in which the entity receives or acquires goods or services and the terms of the arrangement
provide either the entity or the supplier of those goods or services with a choice of whether the entity settles the transaction in cash (or other assets) or by issuing equity instruments.

3. Ind AS 103 Business Combinations

The objective of this Indian Accounting Standard is to improve the relevance, reliability and comparability of the information that a reporting entity provides in its financial statements about a business combination and its effects. To accomplish that, this Indian Accounting Standard establishes principles and requirements for how the acquirer:

(a) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree;

(b) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase1; and

(c) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination.

This Indian Accounting Standard applies to a transaction or other event that meets the definition of a business combination. This Indian Accounting Standard does not apply to:

(a) the formation of a joint venture.

(b) the acquisition of an asset or a group of assets that does not constitute a business. In such cases the acquirer shall identify and recognize the individual identifiable assets acquired (including those assets that meet the definition of, and recognition criteria for, intangible assets in Ind AS 38 Intangible Assets) and liabilities assumed. The cost of the group shall be allocated to the individual identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. Such a transaction or event does not give rise to goodwill.

(c) Appendix C deals with accounting for combination of entities or businesses under common control.

4. Ind AS 104 Insurance Contracts

The objective of this Indian Accounting Standard is to specify the financial reporting for insurance contracts by any entity that issues such contracts (described in this Indian Accounting Standard as an insurer). In particular, this Indian Accounting Standard requires:

(a) limited improvements to accounting by insurers for insurance contracts.

(b) disclosure that identifies and explains the amounts in an insurer’s financial statements arising from insurance contracts and helps users of those financial statements understand the amount, timing and uncertainty of future cash flows from insurance contracts.

An entity shall apply this Indian Accounting Standard to:

(a) insurance contracts (including reinsurance contracts) that it issues, and reinsurance contracts that it holds.

(b) financial instruments that it issues with a discretionary participation feature (see paragraph 35). Ind AS 107 Financial Instruments: Disclosures requires disclosure about financial instruments, including financial instruments that contain such features.

5. Ind AS 105 Non Current Assets Held for Sale and Discontinued Operations

The objective of this Indian Accounting Standard is to specify the accounting for assets held for sale, and the presentation and disclosure of discontinued operations. In particular, the Indian Accounting Standard requires:
(a) assets that meet the criteria to be classified as held for sale to be measured at the lower of carrying amount and fair value less costs to sell, and depreciation on such assets to cease; and (b) assets that meet the criteria to be classified as held for sale to be presented separately in the balance sheet and the results of discontinued operations to be presented separately in the statement of profit and loss.

6. Ind AS 106 Exploration for and Evaluation of Mineral Resources

The objective of this Indian Accounting Standard is to specify the financial reporting for the exploration for and evaluation of mineral resources. In particular, the Indian Accounting Standard requires:

(a) limited improvements to existing accounting practices for exploration and evaluation expenditures.

(b) entities that recognize exploration and evaluation assets to assess such assets for impairment in accordance with this Indian Accounting Standard and measure any impairment in accordance with Ind AS 36 Impairment of Assets.

(c) disclosures that identify and explain the amounts in the entity's financial statements arising from the exploration for and evaluation of mineral resources and help users of those financial statements understand the amount, timing and certainty of future cash flows from any exploration and evaluation assets recognized.

7. Ind AS 107 Financial Instruments: Disclosures

The objective of this Indian Accounting Standard is to require entities to provide disclosures in their financial statements that enable users to evaluate:

(a) the significance of financial instruments for the entity's financial position and performance; and

(b) the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the end of the reporting period, and how the entity manages those risks.

The principles in this Indian Accounting Standard complement the principles for recognizing, measuring and presenting financial assets and financial liabilities in Ind AS 39 Financial Instruments: Recognition and Measurement and Ind AS 32 Financial Instruments: Presentation.

8. Ind AS 108 Operating Segments

An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.

This Accounting Standard shall apply to companies to which Indian Accounting Standards (Ind AS) notified under the Companies Act apply.

If an entity that is not required to apply this Indian Accounting Standard chooses to disclose information about segments that does not comply with this Indian Accounting Standard, it shall not describe the information as segment information.

If a financial report contains both the consolidated financial statements of a parent that is within the scope of this Indian Accounting Standard as well as the parent’s separate financial statements, segment information is required only in the consolidated financial statements.

9. Ind AS 1 Presentation of Financial Statements

This Standard prescribes the basis for presentation of general purpose financial statements to ensure comparability both with the entity’s financial statements of previous periods and with the financial statements of other entities. It sets out overall requirements for the presentation of financial statements, guidelines for their structure and minimum requirements for their contents.
10. Ind AS 2 Inventories
The objective of this Standard is to prescribe the accounting treatment for inventories. A primary issue in accounting for inventories is the amount of cost to be recognized as an asset and carried forward until the related revenues are recognized. This Standard deals with the determination of cost and its subsequent recognition as an expense, including any write-down to net realizable value. It also deals with the cost formulas that are used to assign costs to inventories.

11. Ind AS 7 Statement of Cash Flows
Information about the cash flows of an entity is useful in providing users of financial statements with a basis to assess the ability of the entity to generate cash and cash equivalents and the needs of the entity to utilize those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an entity to generate cash and cash equivalents and the timing and certainty of their generation. The objective of this Standard is to require the provision of information about the historical changes in cash and cash equivalents of an entity by means of a statement of cash flows which classifies cash flows during the period from operating, investing and financing activities.

12. Ind AS 8 Accounting Policies, Changes in Accounting Estimates and Errors
The objective of this Standard is to prescribe the criteria for selecting and changing accounting policies, together with the accounting treatment and disclosure of changes in accounting policies, changes in accounting estimates and corrections of errors. The Standard is intended to enhance the relevance and reliability of an entity’s financial statements, and the comparability of those financial statements over time and with the financial statements of other entities. Disclosure requirements for accounting policies, except those for changes in accounting policies, are set out in Ind AS 1 Presentation of Financial Statements.

13. Ind AS 10 Events after the Reporting Period
The main objective of the Standard is:
- An entity should adjust its financial statements for events after the reporting period
- The disclosures that an entity should give about the date when the financial statements were approved for issue and about events after the reporting date.

The objective of this Standard is to prescribe the accounting treatment of revenue and costs associated with construction contracts. Because of the nature of the activity undertaken in construction contracts, the date at which the contract activity is entered into and the date when the activity is completed usually fall into different accounting periods. Therefore, the primary issue in accounting for construction contracts is the allocation of contract revenue and contract costs to the accounting periods in which construction work is performed. This Standard uses the recognition criteria established in the Framework for the Preparation and Presentation of Financial Statements issued by the Institute of Chartered Accountants of India to determine when contract revenue and contract costs should be recognized as revenue and expenses in the statement of profit and loss. It also provides practical guidance on the application of these criteria.

15. Ind AS 12 Income Taxes
The objective of this Standard is to prescribe the accounting treatment for income tax. The principal issue in accounting for income tax is how to account for the current and future tax consequences of:
- the future recovery (settlement) of the carrying amount of assets (liabilities) that are recognized in an entity’s balance sheet; and
(b) transactions and other events of the current period that are recognized in an entity’s financial statements.

It is inherent in the recognition of an asset or liability that the reporting entity expects to recover or settle the carrying amount of that asset or liability. If it is probable that recovery or settlement of that carrying amount will make future tax payments larger (smaller) than they would be if such recovery or settlement were to have no tax consequences. This Standard requires an entity to recognize a deferred tax liability (deferred tax asset), with certain limited exceptions.

16. Ind AS 16 Property, Plant and Equipment

The objective of this Standard is to prescribe the accounting treatment for property, plant and equipment so that users of the financial statements can discern information about an entity’s investment in its property, plant and equipment and the changes in such investment. The principal issues in accounting for property, plant and equipment are the recognition of the assets, the determination of their carrying amounts, and the depreciation charges and impairment losses to be recognized in relation to them.

17. Ind AS 17 Leases

The objective of this Standard is to prescribe, for lessees and lessors, the appropriate accounting policies and disclosure to apply in relation to leases.

18. Ind AS 18 Revenue

Income is defined in the Framework for the Preparation and Presentation of Financial Statements issued by the Institute of Chartered Accountants of India as increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to the contributions from equity participants. Income encompasses both revenue and gains. Revenue is income that arises in the course of ordinary activities of an entity and is referred to by a variety of different names including sales, fees, interest, dividends and royalties. The objective of this Standard is to prescribe the accounting treatment of revenue arising from certain types of transactions and events.

The primary issue in accounting for revenue determines when to recognize revenue. Revenue is recognized when it is probable that future economic benefits will flow to the entity and these benefits can be measured reliably. This Standard identifies the circumstances in which these criteria will be met. Thus, revenue will be recognized. It also provides practical guidance on the application of these criteria.

19. Ind AS 19 Employee Benefits

The objective of this Standard is to prescribe the accounting and disclosure for employee benefits. The Standard requires an entity to recognize:

(a) a liability when an employee has provided service in exchange for employee benefits to be paid in the future; and

(b) an expense when the entity consumes the economic benefit arising from the service provided by an employee in exchange for employee benefits.


This Standard shall be applied in accounting for, and in the disclosure of, government grants and in the disclosure of other forms of government assistance.

This Standard does not deal with:

(a) the special problems arising in accounting for government grants in financial statements reflecting the effects of changing prices or in supplementary information of a similar nature.
(b) government assistance that is provided for an entity in the form of benefits that are available in determining taxable profit or tax loss, or are determined or limited on the basis of income tax liability. Examples of such benefits are income tax holidays, investment tax credits, accelerated depreciation.

(c) government participation in the ownership of the entity.

21. Ind AS 21 The Effects of Changes in Foreign Exchange Rates

An entity may carry on foreign activities in two ways. It may have transactions in foreign currencies or it may have foreign operations. In addition, an entity may present its financial statements in a foreign currency. The objective of this Standard is to prescribe how to include foreign currency transactions and foreign operations in the financial statements of an entity and how to translate financial statements into a presentation currency.

The principal issues are which exchange rate(s) to use and how to report the effects of changes in exchange rates in the financial statements.

22. Ind AS 23 Borrowing Costs

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset form part of the cost of that asset. Other borrowing costs are recognized as an expense.

An entity shall apply this Standard in accounting for borrowing costs.

The Standard does not deal with the actual or imputed cost of equity, including preferred capital not classified as a liability.

An entity is not required to apply the Standard to borrowing costs directly attributable to the acquisition, construction or production of:

(a) a qualifying asset measured at a fair value, for example, a biological asset; or (b) inventories that are manufactured, or otherwise produced, in large quantities on a repetitive basis.

23. Ind AS 24 Related Party Disclosures

The objective of this Standard is to ensure that an entity’s financial statements contain the disclosures necessary to draw attention to the possibility that its financial position and profit or loss may have been affected by the existence of related parties and by transactions and outstanding balances, including commitments, with such parties.

24. Ind AS 27 Consolidated and Separate Financial Statements

1. This Standard shall be applied in the preparation and presentation of consolidated financial statements for a group of entities under the control of a parent.

2. This Standard does not deal with methods of accounting for business combinations and their effects on consolidation, including goodwill arising on a business combination (see Ind AS 103 Business Combinations).

3. This Standard shall also be applied in accounting for investments in subsidiaries, jointly controlled entities and associates when an entity elects, or is required by law, to present separate financial statements.

25. Ind AS 28 Investments in Associates

This Standard shall be applied in accounting for investments in associates. However, it does not apply to investments in associates held by:
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(a) venture capital organizations

(b) Initial recognition are designated as at a fair value through profit or loss or are classified as held for trading and accounted for in accordance with Ind AS 39 Financial Instruments: Recognition and Measurement. Such investments shall be measured at fair value in accordance with Ind AS 39, with changes in fair value recognized in profit or loss in the period of the change. An entity holding such an investment shall make the disclosures.


1. This Standard shall be applied to the financial statements, including the consolidated financial statements, of any entity whose functional currency is the currency of a hyperinflationary economy.

2. In a hyperinflationary economy, reporting of operating results and financial position in the local currency without restatement is not useful. Money loses purchasing power at such a rate that comparison of amounts from transactions and other events that have occurred at different times, even within the same accounting period, is misleading.

27. Ind AS 31 Interests in Joint Ventures

This Standard shall be applied in accounting for interests in joint ventures and the reporting of joint venture assets, liabilities, income and expenses in the financial statements of venturers and investors, regardless of the structures or forms under which the joint venture activities take place. However, it does not apply to venturers’ interests in jointly controlled entities held by:

(a) venture capital organizations

(b) Initial recognition are designated as at a fair value through profit or loss, or are classified as held for trading and accounted for in accordance with Ind AS 39 Financial Instruments: Recognition and Measurement. Such investments shall be measured at fair value in accordance with Ind AS 39, with changes in fair value recognized in profit or loss in the period of the change. A venturer holding such an interest shall make the disclosures.

28. Ind AS 32 Financial Instruments: Presentation

1. The objective of this Standard is to establish principles for presenting financial instruments as liabilities or equity and for offsetting financial assets and financial liabilities. It applies to the classification of financial instruments, from the perspective of the issuer, into financial assets, financial liabilities and equity instruments; the classification of related interest, dividends, losses and gains; and the circumstances in which financial assets and financial liabilities should be offset.

2. The principles in this Standard complement the principles for recognising and measuring financial assets and financial liabilities in Ind AS 39 Financial Instruments: Recognition and Measurement, and for disclosing information about them in Ind AS 107 Financial Instruments: Disclosures.

29. Ind AS 33 Earnings per Share

The objective of this Standard is to prescribe principles for the determination and presentation of earnings per share, so as to improve performance comparisons between different entities in the same reporting period and between different reporting periods for the same entity. Even though earnings per share data have limitations because of the different accounting policies that may be used form determining ‘earnings’, a consistently determined denominator enhances financial reporting. The focus of this Standard is on the denominator of the earnings per share calculation.
30. Ind AS 34 Interim Financial Reporting

The objective of this Standard is to prescribe the minimum content of an interim financial report and to prescribe the principles for recognition and measurement in complete or condensed financial statements for an interim period. Timely and reliable interim financial reporting improves the ability of investors, creditors, and others to understand an entity’s capacity to generate earnings and cash flows and its financial condition and liquidity.

31. Ind AS 36 Impairment of Assets

The objective of this Standard is to prescribe the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. An asset is carried at more than its recoverable amount if its carrying amount exceeds the amount to be recovered through use or sale of the asset. If this is the case, the asset is described as impaired and the Standard requires the entity to recognize an impairment loss. The Standard also specifies when an entity should reverse an impairment loss and prescribes disclosures.

32. Ind AS 37 Provisions, Contingent Liabilities and Contingent Assets

The objective of this Standard is to ensure that appropriate recognition criteria and measurement bases are applied to provisions, contingent liabilities and contingent assets and that sufficient information is disclosed in the notes to enable users to understand their nature, timing and amount.

33. Ind AS 38 Intangible Assets

The objective of this Standard is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another Standard. This Standard requires an entity to recognize an intangible asset if, and only if, specified criteria are met. The Standard also specifies how to measure the carrying amount of intangible assets and requires specified disclosures about intangible assets.

34. Ind AS 39 Financial Instruments: Recognition and Measurement

The objective of this Standard is to establish principles for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. Requirements for presenting information about financial instruments are in Ind AS 32, Financial Instruments: Presentation. Requirements for disclosing information about financial instruments are in Ind AS 107 Financial Instruments: Disclosures.

35. Ind AS 40 Investment Property

The objective of this Standard is to prescribe the accounting treatment for investment property and related disclosure requirements.

This Standard shall be applied in the recognition, measurement and disclosure of investment property.

Among other things, this Standard applies to the measurement in a lessee’s financial statements of investment property interests held under a lease accounted for as a finance lease and to the measurement in a lessor’s financial statements of investment property provided to a lessee under an operating lease. This Standard does not deal with matters covered in Ind AS 17 Leases, including:

(a) classification of leases as finance leases or operating leases;
(b) recognition of lease income from investment property (see also Ind AS 18 Revenue);
(c) measurement in a lessee’s financial statements of property interests held under a lease accounted for as an operating lease;
Comparison of Indian GAAP, IFRS and Ind AS

The significant difference between the Indian GAAP (current Indian Accounting Standards) converged Indian Accounting Standards (Ind AS) and IFRS (International Financial Reporting Standards) are discussed in detail in the following pages.

Presentation of Financial Statements

ACCOUNTING STANDARD REFERENCE

COMPARISON OF Ind AS WITH EXISTING INDIAN GAAP

- Ind AS 1 prohibits presentation of any item as extraordinary item in the statement of profit and loss or in the notes as compared to existing AS 1 which allows for extraordinary items to be disclosed separately.

- Ind AS 1 requires disclosure of critical assumptions about the future and other sources of measurement uncertainty that can affect carrying amounts of assets and liabilities within next financial year. Existing AS 1 does not require any such disclosure.

- Ind AS 1 requires that classification of expenses be presented on the basis of nature of expenses.

- Ind AS 1 requires that in case of reclassification of items, nature, amount and reason for reclassification are disclosed in notes to financial statement. No such nature, amount and reason for reclassification are required to be disclosed under existing AS 1.

Ind AS 1 requires that a statement of changes in equity is including reconciliation between opening and closing balance for each component of equity. Under existing AS 1, Statement of changes in equity is not required.

Comparison of Ind AS with IFRS (International Accounting Standards)

- With regards to preparation of statement of profit and loss. International Accounting Standard IAS 1, Presentation of Financial Statement provides with an option to follow either the single statement approach or the two statements approach. While single statement approach allows for all items of income and expense to be recognized in the statement of profit and loss, two statements approach requires preparation of two statements, one displaying components of profit or loss (separate income statement) and the other beginning with profit or loss and displaying components of other comprehensive income. In comparison to IAS 1, Ind AS 1 allows only for the single statement approach.

- As against IAS 1, which requires separate statement of changes in equity, Ind AS 1 requires statement of changes in equity to be shown as a part of balance sheet.

- Ind AS 1 does not permit periodicity as against IAS 1 which allows for periodicity (for example, of 52 weeks for preparation of financial statements).

- IAS I allows classification of expenses based on either their nature or their function within the equity as compared to Ind AS 1 which requires only naturewise classification of expenses.

Existing Indian GAAP

- Ind AS 2 provides for reversal of the write-down of inventories to net realizable value limited to the amount of original write-down, and requires recognition and disclosure thereof in the financial statements. Existing AS 2 does not provide any specific guidance on the same.

- Existing AS 2 excludes from its scope inventories held by commodity broker traders (who measure their inventories at a fair value minus costs to sell), producers of agricultural and forest products, agricultural produce after harvest, and minerals and mineral products. In contrast, Ind AS 2 excludes from its
scope only the measurement of such inventories. Further Ind AS 2 defines fair value and provides an explanation in respect of distinction between net realizable value and fair value.

- While Ind AS 2 provides explanation with regard to inventories of service providers, existing AS 2 does not contain such an explanation.

While Ind AS 2 requires only the use of consistent cost formulas for all inventories having a similar nature and use to the entity, existing AS 2 specifically requires that the formula used in determining the cost of an item of inventory should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition.

**Statement of Cash Flows**

**Comparison of Ind AS with existing Indian GAAP**

- As compared to existing AS 3, Ind AS 7 specifically includes bank overdrafts which are repayable on demand as a part of cash and cash equivalents. Under Ind AS 7, cash payments to manufacture or acquire assets held for rental to others and subsequently held for sale in the ordinary course of business are treated as cash flows from operating activities. Similarly, cash receipts from rent and subsequent sale of such assets are also treated as cash flows from operating activities. Existing AS 3 does not specify the same.

- Existing AS 3 requires cash flows associated with extraordinary activities to be separately classified as arising from operating, investing, and financing activities. Ind AS 7 does not require such classification as presentation of extraordinary items is prohibited.

- Ind AS 7 specifically includes the following items to be classified as cash flows arising from financing activities: (a) cash payments to owners to acquire or redeem the entity's shares, (b) cash proceeds from mortgages, (c) cash payments by a lessee for the reduction of the outstanding liability relating to a financing lease. Further, cash flows arising from changes in ownership interests in a subsidiary that do not result in a loss of control are required to be treated as cash flow from financing activities.

- Ind AS 7 specifically contains in its scope use of equity or cost method while accounting for an investment in an associate or a subsidiary as against the existing one.

- AS 3 which do not have any such requirement. Ind AS 7 specifically uses the term ‘functional currency’ instead of ‘reporting currency’ used in the existing AS 3.

**Comparison of Ind AS with IFRS (International Accounting Standards)**

Under IAS 7 there is an option to classify interest and dividend paid/interest and dividend received as part of operating cash flows. Ind AS 7 do not provide for any such option and treats interest and dividend paid / interest and dividend received as financing / investing activity, respectively.

**Accounting Policies Changes in Accounting Estimates and Errors**

**Comparison of Ind AS with existing Indian GAAP**

- Ind AS 8 requires rectification of prior period errors with retrospective effect subject to limited exceptions; whereas existing AS 5 requires the rectification of prior period items with prospective effect.

While existing AS 5 defines prior period items as incomes or expenses which arise in the current period as a result of errors or omissions in the preparation of financial statements of one or more prior periods, Ind AS 8 defines the term errors as arising from a failure to use or misuse reliable information that was available when
the financial statements of the prior periods were approved for issuance and could reasonably be expected to obtained and taken into account in the preparation and presentation of those financial statements.

Comparison of Ind AS with IFRS (International Accounting Standards)

NO SIGNIFICANT DIFFERENCES

Construction Contracts

Comparison of Ind AS with existing Indian GAAP

Existing AS 7 measures contract revenue at consideration received / receivable. Ind AS 11 requires contract revenue to be measured at a fair value of consideration received / receivable.

Ind AS 11 deals with accounting for service concession arrangements and agreements for construction of real estate; whereas existing AS 7 does not deal with accounting aspects involved in such arrangements.

Comparison of Ind AS with IFRS (International Accounting Standards)

While Ind AS 11 deals with accounting for construction contracts in respect of real estate developers, IAS 11 does not deal with the same.

Income Taxes

Comparison of Ind AS with existing Indian GAAP

- Existing AS 22, based on income statement approach, recognizes tax consequences of differences between taxable income and accounting income. Ind AS 12, in contracts, is based on balance sheet approach and recognizes tax consequences of differences between the carrying amounts of assets and liabilities and their tax base.

- Existing AS 22 recognizes and carries forward deferred tax assets only to the extent where there is a reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be utilized. Ind AS 12 recognizes deferred tax assets for all deductible temporary difference to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized.

- Under existing AS 22, deferred tax assets in case of unused tax losses and unabsorbed depreciation is recognized to the extent that there is virtual certainty supported by convincing evidence that sufficient future taxable income will be available against which such deferred tax assets can be realized. Under IndAS 12, deferred tax assets in case of unused tax losses and unabsorbed depreciation are recognized only to the extent that the entity has sufficient taxable temporary differences, or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses or unused tax credits can be utilized by the entity.

Comparison of Ind AS with IFRS (International Accounting Standards)

No significant differences

Property Plant and Equipment

Comparison of Ind AS with existing Indian GAAP

- Existing AS 10 specifically excludes accounting for real estate developers from its scope, whereas Ind AS 16 does not exclude such developers from it scope.
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- Ind AS 16 requires that initial costs as well as the subsequent costs are evaluated according to the same recognition principles to determine whether the same should be recognized as an item of property, plant and equipment. Existing AS 10 prescribes separate recognition principles for initial and subsequent expenditures.

- Under existing AS 10, spare parts which can be used only in connection with a fixed asset and whose use is expected to be irregular are required to be capitalized. Under Ind AS 16, major spare parts qualify as property, plant and equipment when an entity expects to use them for more than one period, and when they can be used only in connection with an item of property, plant and equipment.

- Ind AS 16 adopts component approach wherein each major part of an item of property, plant and equipment is depreciated separately. Existing AS 10, however, does not mandatorily require full adoption of the component approach.

- Ind AS 16 requires compensation from third parties for items of property, plant and equipment that were impaired, lost or given up to be included in the statement of profit and loss when the compensation becomes receivable. Existing AS 10 is silent on this aspect.

- Ind AS 16 requires gains arising on derecognition of an item of property, plant and equipment to be treated as revenue. Existing AS 10 is silent on this aspect.

Comparison of Ind AS with IFRS (International Accounting Standards)

No significant differences

Leases

Comparison of Ind AS with existing Indian GAAP

- Ind AS 17 specifically includes in its scope provisions dealing with leases of land and building. Existing AS 17 is silent on the same.

- Ind AS 17 specifically defines and distinguishes between inception and commencement of lease and deals with the adjustment of lease payment during the period between inception of the lease and the commencement of the lease term. Existing AS 19 does not deal with the same.

- Ind AS 17 specifically defines the term initial direct costs and differs in treatment of the same from the existing standard.

- Ind AS 17 requires classification of lease liabilities into current/non-current if such classification is made for other liabilities. Existing AS 17 is silent on the same.

- Ind AS 17 contains guidance on accounting for incentives in the case of operating leases, evaluating the substance of transactions involving the legal form of a lease and determining whether an arrangement contains a lease. Existing AS 17 is silent on the same.

Comparison of Ind AS with IFRS (International Accounting Standards)

No significant differences

Revenue

Comparison of Ind AS with existing Indian GAAP

- Under Ind AS 18, definition of ‘Revenue’ is much broader in scope as compared to existing AS 9 and covers all economic benefits that may arise in the ordinary course of activities of an entity which may result in the increase in equity, other than increases relating to contributions from equity participants.
• Ind AS 18 requires revenue to be measured at a fair value of the consideration received or receivable as against existing AS 9 which recognizes revenue at the nominal amount of consideration receivable.

• While existing AS 9 is silent on barter transaction, Ind AS 18 specifically deals with barter transactions involving advertising services.

• Ind AS 18 provides guidance on application of recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction. Existing AS 9 is silent on the same.

• Ind AS 18 requires the use of percentage of completion method only for recognition of revenue as against completed service contract method in existing AS 9

**Comparison of Ind AS with IFRS (International Accounting Standards)**

No significant differences

**Employee Benefits**

**Comparison of Ind AS with existing Indian GAAP**

• While Ind AS 19 covers employee benefits arising from constructive obligations, existing AS 15 is silent on the same. Further under Ind AS 19 the term employee includes directors as against existing AS 15 where the term employee includes whole time directors.

• Ind AS 19 in its scope, covers situations of contractual agreement between a multi employer plant and its participants that determines how the surplus in the plan will be distributed to the participants (or the deficit funded). Existing AS 15 is silent on the same.

• Existing AS 15 defines the limit for as set ceiling as present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. Ind AS 19 defines the same as the total of (i) any cumulative unrecognized past service cost and (ii) the present value of economic benefits available in the form of refunds from the plan or reduction in future contributions to the plan.

**Comparison of Ind AS with IFRS (International Accounting Standards)**

• While Ind AS 19 recognize actuarial gains and losses in other comprehensive income, both for post-employment defined benefit plans and other long-term employment benefit plans. IAS 19 permits various options for treatment of actuarial gains and losses for post-employment defined benefit plants.

• IAS 19 does not contain any guidance on detailed actuarial valuation of defined benefit obligations.

• For discounting post-employment benefit obligation, Ind AS 19 specifies use of reference rates as market yields on government bonds. IAS 19 on the other hand, requires use of yields on government bonds only when reference rates for high quality corporate bonds are not available.

**Accounting for Government Grants and Disclosure of Government Assistance**

**Comparison of Ind AS with existing Indian GAAP**

• Existing AS 12 requires government grants of the nature of promoters contribution to be credited directly to capital reserve and treated as a part of shareholders funds. Ind AS 20 does not recognize government grants of such nature and accordingly recognize as income over the periods.

• Ind AS 20 value non-monetary grants at their fair value as against AS 12 which records it at nominal value.
While under existing AS 12, grants related to assets (including non-monetary grants) can be presented as deferred income or by deducting the grant from the gross value of asset concerned in arriving at its book value, Ind AS 20 requires such grants to be presented as deferred income only.

Comparison of Ind AS with IFRS (International Accounting Standards)

- Ind AS 20 measures non-monetary grants at their fair value, whereas IAS 20 gives an option to measure the same either at their fair value or at nominal value.
- While Ind AS 20 requires grants related to assets (including non-monetary grants) to be presented as deferred income only, IAS 20 gives an option to present the same as deferred income or by deducting the grant in arriving at the carrying amount of the asset.

The Effects of Change in Foreign Exchange Rates

Comparison of Ind AS with existing Indian GAAP

- Existing AS 11 covers in its scope, forward exchange contracts and other similar financial instruments. Ind AS 21 excludes the same (as it gets treated in accordance with Ind AS 39 Financial Instruments: Recognition and Measurement).
- As against existing AS 11 which is based on reporting currency approach, Ind AS 21 is based on functional currency approach.
- While Ind AS 21 allows for presentation currency to be different from local currency, existing AS 11 does not allow it.
- Ind AS 21 allows recognizing of exchange differences arising on translation of certain long-term monetary items from foreign currency to functional currency directly in equity and transferring the same to profit or loss over the term of such items in an appropriate manner. Existing AS 11 permits such an option for items not related to acquisition of fixed assets upto 31st March 2011, where such items are related to acquisition of fixed assets, the foreign exchange differences can be recognized as part of the cost of the asset.

Comparison of Ind AS with IFRS (International Accounting Standards)

Ind AS 21 allows recognizing of exchange differences arising on translation of certain long-term monetary items from foreign currency to functional currency directly in equity and transferring of the same to profit or loss over the term of such items in an appropriate manner. IAS 21 does not allow for such a treatment.

Borrowing Costs

Comparison of Ind AS with existing Indian GAAP

- As against AS 16. Ind AS 23 given an option to an entity to exclude from this standards, borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset measured at fair value. Further it also excludes application of this standard to borrowing costs directly attributable to the acquisition, construction or production of inventories that are manufactured, otherwise produced, in large quantities on a repetitive basis.

Comparison of Ind AS with IFRS (International Accounting Standards)

No Significant Differences
Related Party Disclosures

Comparison of Ind AS with existing Indian GAAP

Under Ind AS 24, the scope and definition of relatives (or close members of the family) government enterprises, key management personnel (KMP) and joint ventures have been expanded. Further Ind AS 24 requires additional disclosures in case of government related enterprises and compensation of KMP under different categories.

Comparison of Ind AS with IFRS (International Accounting Standards)

While Ind AS 24 does not require disclosures which conflict with confidentiality requirements of statute/regulations, IAS 24 do requires some minimum disclosures of such nature.

Consolidated and Separate Financial Statements

Comparison of Ind AS with existing Indian GAAP

- Under Ind AS 27 preparation of consolidated financial statements is mandatory for a parent as compared to existing AS 21 which does not mandate the same.
- Under existing AS 21 there is no guidance regarding accounting for investments in subsidiaries, jointly controlled entities and associates in preparing the separate financial statements Ind AS 27 contains guidance regarding the same.
- Unlike AS 21 which provides for exclusion of subsidiary from consolidation under circumstances where control is intended to be temporary or when subsidiary operates under serve long term restrictions. Ind AS 27 does not provide any such exemption from consolidation.
- AS 21 does not take into account potential equity shares of the investee held by investor for considering share ownership. Ind AS 27 takes into account existence and effect of potential voting rights that are currently exercisable or convertible while assessing the control of entity over the subsidiary.

Comparison of Ind AS with IFRS (International Accounting Standards)

No Significant Differences

Investment in Associates

Comparison of Ind AS with existing Indian GAAP

- Existing AS 23 includes in its scope, investments in associates held by venture capital organizations, mutual funds, unit trusts and similar entities including investment linked insurance funds Ind AS 28 excludes them from its scope as the same is included in Ind AS 39 (Financial Instruments : Recognition and Measurement)
- Existing AS 23 does not consider potential equity shares of the investee held by investor for determining significant influence. Ind AS 28 considers existence and effect of potential voting rights that are currently exercisable or convertible for assessing significant influence.
- While existing AS 23 requires application of the equity method only in case of subsidiary consolidation, Ind AS 28 requires application of equity method in financial statement, even if the entity does not have subsidiaries.
- While existing AS 23 specifies no maximum difference between the reporting date of the associate and that of the parent, as per Ind AS 28, length of difference in the reporting dates of the investor and the parent should not be more than three months unless it is impractical.
While both existing AS 23 and Ind AS 28 require uniform accounting policies for the preparation of investor’s financial statements for alike transactions and events in similar circumstances, existing AS 23 provides exemption to the same, if it is not possible to make adjustments to the accounting policies of the associates. However, the fact needs to be disclosed along with a brief description of the differences between the accounting policies.

Comparison of Ind AS with IFRS (International Accounting Standards)

Where the financial statements of an associate used in applying equity method are prepared as date from that of the investor, IAS 28 requires that this gap of the time on a different should not be more than three months. However, paragraph 25, Ind AS 28 also provides that this difference should not be more than three months, unless it is impractical. Similarly, paragraph 26 of Ind AS 28 requires use of uniform accounting policies, unless impractical which IAS 28 does not provide.

Interest in Joint Ventures

Comparison of Ind AS with existing Indian GAAP

Ind AS 31 is not applicable to joint venture investments made by venture capital organizations, mutual funds, unit trusts and similar entities including investment linked insurance funds. Existing AS 27 does not make such exclusion from its scope.

While existing AS 27 requires use of proportionate consolidation method only for recognizing interest in a jointly controlled entity, Ind AS 31 allows either of proportionate consolidation method or equity method.

Under existing AS 27 proportionate consolidation method is applied only when entity prepares consolidated financial statement for subsidiaries; Ind AS 31 requires proportionate consolidation even if consolidated financial statements are not prepared (e.g., when ventures has no subsidiaries).

Under existing AS 27 interest in joint ventures is accounted at costless provision for other than temporary decline in the value of investment, Ind AS 31 requires it to be recognized at cost or in accordance with Ind AS 39.

Existing AS 27 contains no specific guidance on venturer’s accounting for non-monetary contributions to a jointly controlled entity. Ind AS 31 specifically deals with the same.

Comparison of Ind AS with IFRS (International Accounting Standards)

No Significant Differences

Financial Instruments Presentation

Comparison of Ind AS with existing Indian GAAP

Exiting AS 31 exempts contracts for contingent consideration in a business combination in case of acquirers. Ind AS 32 does not exempt the same.

Ind AS 32 specifies that a financial asset and a financial liability shall be off set when an entity has a legally enforceable right to set off the recognized amounts and intends to either settle on a net basis, or realize the asset and settle the liability simultaneously. Existing AS 31 does not specify the same.

Ind AS 32 defines and deals with puttable instruments. Existing AS 31 does not do so.

Ind AS 32 requires that in some circumstances because of the differences between interest and
dividends with respect to matters such as tax deductibility it is desirable to disclose them separately in the statement of profit and loss. Existing AS 31 does not specify the same.

- Ind AS 12 specifically requires that the related amount of income tax recognized directly in equity is included in the aggregate amount of current and deferred income tax credited or charged to equity that is disclosed under Ind AS 12 (Income Taxes). Existing AS 31 does not specify the same.

- As an exception to the definition of financial liability, Ind AS 32 considers the equity conversion option embedded in a convertible bond denominated in foreign currency to acquire a fixed number of entity’s own equity instrument as an equity instrument if the exercise price is fixed in any currency.

**Comparison of Ind AS with IFRS (International Accounting Standards)**

As an exception to the definition of financial liability in paragraph 11(b), (ii) Ind AS 32 considers the equity conversion option embedded in a convertible bond denominated in foreign currency to acquire a fixed number of entity’s own equity instruments as an equity instrument, if the exercise price is fixed in any currency. This exception is not provided in IAS 32.

**Earnings Per Share**

**Comparison of Ind AS with existing Indian GAAP**

- Ind AS 33 specifically deals with options held by the entity on its share. Existing AS 20 does not deal with the same.

- In AS 33 requires presentation of basic and diluted EPS from continuing and discontinued operations separately. Existing AS 20 does not require the same.

- Existing AS 20 requires the presentation of EPS with and without extraordinary items. Ind AS 33 does not require the same as Ind AS 1 (Presentation of Financial Statements) prohibits the disclosure of items as extraordinary.

**Comparison of Ind AS with IFRS (International Accounting Standards)**

Ins AS 33 requires EPS related information to be disclosed both in consolidated financial statement and as a separate financial statement; IAS 33 requires EPS related information to be presented only in consolidated financial statements.

**Interim Financial Reporting**

**Comparison of Ind AS with existing INDIAN GAAP**

- Under existing AS 25 if an entity is required or elects to prepare and present an interim financial report, it should comply with that Standard. Ind AS 34 requires such compliance only if the interim financial report is required to be prepared and presented in accordance with accounting standards.

- Existing AS 25 requires at a minimum condensed balance sheet, a condensed statement of profit and loss, a condensed cash flow statement and selected explanatory notes in the contents of an interim financial report, Ind AS 34, in addition, requires a condensed statement of changes in equity for the period in addition to above requirements.

- While existing AS 25 requires preparation of both consolidated and separate financial statements, complete or condensed, Ind AS 34 neither requires nor prohibits the inclusion of the parents’ separate statements in the entity’s interim report prepared on a consolidate basis.

- Ind AS 34 specifies that information, if significant, on both contingent liabilities and contingent assets is required to be furnished. Existing AS 25 requires furnishing of information on contingent liabilities only.
Comparison of Ind AS with IFRS (International Accounting Standards)

- For preparation of statement of profit and loss, IAS 34 (Interim Financial Reporting) provides option either to follow single statement approach, two statement approach. Ind AS 34 allows for only single statement approach (on the line of Ind AS 1 Presentation of Financial Statements).
- While Ind AS 34 requires statement of changes in equity to be shown as a part of the balance sheet, IAS 34 requires preparation of a statement of changes in equity as a separate statement.

Impairment of Assets

Comparison of Ind AS with existing Indian GAAP

- Existing AS 28 does not require goodwill to be tested for impairment annually unless there is an indication of impairment. Ind AS 36 requires goodwill and other intangible assets to be tested for impairment at last annually.
- Existing AS 28 allows for reversal of impairment losses on account of goodwill in a subsequent period if the loss was caused by a specific external event of an exceptional nature that is not expected to recur, and subsequent external events that would occur and reverse the effect of that event. Ind AS 36 prohibits reversal of impairment losses in a subsequent period.
- Existing AS 28 specifies bottom up or top-down approach for allocation of goodwill under which goodwill is tested for impairment by allocating its carrying amount to each CGU (cash generating unit) or the smallest CGU on a reasonable and consistent basis. Under Ind AS 36 there is no bottom-up or top-down approach for allocation of good will. Rather goodwill is allocated to CGUs that are expected to benefit from the synergies of the business combination from which it arose.

Provisions, Contingent Liabilities and Contingent Assets

Comparison of Ind AS with existing Indian GAAP

- Under existing AS 29 provisions are not recognized on constructive obligations. However, provisions may be created on account of obligations arising out of normal business practices, custom and a desire to maintain good business relations or to act in an equitable manner. Ind AS 37 two requires creation of provisions in respect of constructive obligations.
- Ind AS 37 requires discounting of the amount of provisions in cash effect of the time value of money is material. The same is prohibited under AS 29.
- AS 29 does not require disclosure of contingent assets in the financial statements. Ind AS 37 requires disclosure of same, when the inflow of economic benefits is probable.

Intangible Assets

Comparison of Ind AS with existing Indian GAAP

- Existing standard AS 26 allows for only the cost model as a part of accounting policy. Ind AS 38 permits re-evaluation model in addition to cost model.
• Under existing standard AS 26, useful life of an intangible asset is not always indefinite. It includes a rebuttable presumption that the useful life will not exceed ten years from the date the asset is available for use. Ind AS 38 recognizes that useful life may be finite or indefinite subject towards fulfillment of certain conditions.

• Under the existing standard AS 26, if an intangible asset is acquired in exchange of a non-monetary asset, its cost should be recognized with reference to the fair market value of the consideration given. Ind AS 38 requires such intangible asset to be recognized at the fair value of the asset given up unless (a) the exchange transaction lacks commercial substance, or (b) the fair value of neither the asset received nor the asset given is reliably measurable.

• Ind AS 38 requires that in case of deferment of payment beyond normal credit terms in case of an intangible asset. The difference between this amount and the total payments is to be recognized as interest expense over the period of credit unless it is capitalized as per Ind AS 23. Existing AS 26 is silent on this aspect.

Comparison of Ind AS with IFRS (International Accounting Standards)

With regards to the acquisition of an intangible asset by way of a government grant, Ind AS 38 allows only the fair value for recognizing the intangible asset and grant in accordance with Ind AS 20. IAS 38 provides the option to an entity to recognize both asset and grant initially at a fair value, or at a nominal amount plus any expenditure that is directly attributable to preparing the asset for its intended use.

Business Combinations

Comparison of Ind AS with existing Indian GAAP

• Ind AS 103 is much wider in scope as it deals with business combinations compared to the existing AS 14 which defines only amalgamations.

• Existing AS 14 allows pooling of interest method as well as purchase method for amalgamation. Whereas Ind AS 103 allows for only acquisition method for each business combination.

• Existing AS 14 requires that acquired assets and liabilities are recognized at their existing book value or at the fair value under the purchase method. On the other hand Ind AS 103 requires the acquired identifiable assets liabilities and non-controlling interest to be recognized at a fair value under acquisition method.

• Existing as 14 defines that the minority interest is the amount of equity attributable to minorities at the date on which investment in a subsidiary is made, and it is shown outside as shareholders equity. Ind AS 103 requires that for each business combination, the acquirer shall measure any non-controlling interest in the acquired at either a) a fair value, or b) the present ownership instruments’ proportionate share in the recognized amount of the acquiree’s identifiable net assets.

• Existing AS 14 requires amortization of goodwill arising on amalgamation in the nature of purchase. Whereas Ind AS 103 requires goodwill to be tested impairment on an annual basis in accordance with Ind AS 36.

• Ind AS 103 specifically provides guidance on accounting for reverse acquisitions. Existing AS 14 is silent on the same.

• Ind AS 103 requires bargain purchase gain arising on business combination to be recognized as other comprehensive income on the acquisition date and accumulation of the same in equity as capital reserve. Existing AS 14 treats the excess amount as capital reserve.

Comparison of Ind AS with IFRS (International Accounting Standards)

• Ind AS 103 deals with business combinations of entities under common control. IFRS 103 excludes the same from its scope.
IFRS 3 requires bargain purchase gain arising on business combination to be recognized as profit or loss. Ind AS 103 requires the same to be recognized as part of the other comprehensive income and accumulated in equity as capital reserve, unless there is no clear evidence for the underlying reason for classification of the business combination as a bargain purchase, in which, it shall be recognized directly in equity as capital reserve.

### Non-Current Assets Held for Sale and Discontinued Operations

#### Comparison of Ind AS with existing Indian GAAP

- Ind AS 105 specifically deals with accounting for non-current assets held for sale. Under existing AS 24, same is not dealt with. Rather it falls under the ambit of existing AS 10 (Accounting for Fixed Assets).
- Under Ind AS 105 non-current assets held for sale are measured lower than the carrying amount, and fair value minus costs to sell. Existing AS 24 follows the principles set out in existing AS 10 which requires fixed assets retired from active uses and held for sale to be stated at the lower of their net book value and net realizable value.
- If under AS 24, classification of discontinuing operation happens at the occurrence of one of the following (a) the enterprise has entered into a binding sale agreement for substantially all of the assets attributable to the discontinuing operation; or (b) the enterprise’s Board of Directors or similar governing body has both (i) approved a detailed, formal plan for the discontinuance, and (ii) made an announcement of the plan. Under Ind AS 105, an operation is classified as discontinued when either it has been disposed of, or is classified as held for sale.

#### Comparison of Ind AS with IFRS (International Accounting Standards)

No Significant Differences

### Financial Instruments : Disclosures

#### Comparison of Ind AS with existing Indian GAAP

- Existing AS 32 does not deal with contracts for contingent consideration in a business combination in case of acquirers Ind AS 107 deals with the same.
- Ind AS 107 requires specific disclosures in case of reclassification of a financial asset out of fair value through profit or loss category or out of available-for-sale category in accordance with Ind AS 39 AS 32 does not require the same.

#### Comparison of Ind AS with IFRS (International Accounting Standards)

No Significant Differences

### Operating Segments

#### Comparison of Ind AS with existing Indian GAAP

- Existing AS 17 requires an enterprise to identify segments based on business products and geographical areas with internal financial reporting system serving only as the starting point for identifying those items that can be directly attributed, or reasonably allocated, to segments. Ind AS 108, on the contrary identifies segments based on internal reports regularly reviewed by the entity’s chief operating decision maker so as to make decisions about resources to be allocated to the segment and assess its performance.
Lesson 12  Adoption, Convergence and Interpretation of IFRS and Accounting Standards in India

- Under existing AS 17 segment information is prepared in conformity with the accounting policies adopted for preparing and presenting the financial statements. Ind AS 108 requires measurement basis for cash segment reported to be that used by the chief operating decision-maker for the purposes of making decisions about allocating resources to the segment and assessing its performance.

- Ind AS 108 specifically requires aggregation criteria for aggregation of two or more segments. AS 17 does not deal with the same.

- Existing AS 17 requires disclosures based on the classification of the segments as primary or secondary segments. Ind AS 108 requires disclosures of revenues from external customers for each product and service, or each group of similar products and services. With respect to geographical areas, disclosure is required for revenues from external customers (i) attributed to the entity’s country of domicile and (ii) attributed to all foreign countries in total from which the entity derives revenue.

Comparison of Ind AS with IFRS (International Accounting Standards)

No Significant Differences

LESSON ROUND UP

- The objective of general purpose financial reporting is to provide financial information that is useful for existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.

- Two important characteristics of financial information relates to relevance and reliability.

- Convergence of varied accounting standards with international financial reporting standards (IFRS) has gained worldwide momentum in recent years to ensure uniformity and transparency in reporting standards.

- India has committed to convergence of its Indian Accounting Standards (Ind AS) with IFRS in a phased manner beginning April 1, 2016.

- A revised roadmap for implementation of Indian Accounting Standards (Ind AS) finalized by the council of the ICAI (Institute of Chartered Accountants of India) and submitted to MCA (Ministry of Corporate Affairs) for its consideration.

SELF TEST QUESTIONS

1. Put a cross (X) on only one of the four alternative choices given:
   1. Under Ind AS 1, presentation of any items of income or expense as extraordinary is –
      a) Separately disclosed
      b) Shown as a part of statement of profit and loss
      c) Prohibited
      d) None of the above

2. Ind AS 11 requires contract revenue to be measured at –
   a) Net realizable value
   b) Fair value of consideration received/receivable
2. Discuss the importance of relevance and reliability characteristics of financial information and the need for uniformity and transparency in reporting standards.

3. Discuss the roadmap for implementation of Indian Accounting Standards (Ind AS) to achieve convergence with IFRS (International Financial Reporting Standards).
Lesson 13
Overview of Cost

LESSON OUTLINE

- Concept of Cost
- Costing, Cost Accounting and Cost Accountancy
- Importance & Relevance of Cost Accounting
- Objectives of Cost & Management Accounting
- Scope of Cost & Management Accounting
- Elements of Cost
- Material Cost
- Labour Cost
- Direct Expenses
- Overheads
- Cost Sheet
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

Cost accounting is distinct and different from general financial accounting, which is regulated by generally accepted accounting principles (GAAP), and is responsible for creating financial statements. Cost accounting aims at reporting, analyzing and leading to the improvement of inter-business cost control and efficiency. Cost accounting is a system of operational analysis for management.

The simplest and most important objective of cost accounting is to determine selling prices. To use a basic example, the seller of sandwiches needs to be able to track the cost of bread, lettuce, sandwich meats, mustard and other ingredients. Otherwise, it would be difficult for him to know how much to charge for a sandwich.

Management Accounting is the process of preparing management reports and accounts that provide accurate and timely financial and statistical information required by managers to make day-to-day and short-term decisions.

Therefore the objective of the lesson is to enable the student to understand the meaning and purpose of cost and management accounting. The several methods and technique of cost accounting so that has to understand various information he can provided to management for decision-making.

After going through this lesson the students will be able to:

- Understand the importance, relevance, objective & scope of cost accounting, management accounting and cost accounting standards.
- Understand the different elements of cost accounting for appropriate decision-making.
- Understand the meaning & importance of Material Cost, Labour Cost, Direct Expenses and Overheads.
- Understand the meaning of Cost Sheet, and how it is useful for, calculating the cost of the product in a business.
CONCEPTS OF COST

Cost is the amount of resource given in exchange for some goods or services. The resource given money or money’s equivalent expressed in monetary units.

The Chartered Institute of Management Accountants (CIMA), London defines cost as “the amount of expenditure (actual or notional) incurred on or attributable to a specified thing or activity”.

This activity of a firm may be the manufacture of a product or rendering of a service which involves expenditure under various heads, e.g. materials, labour and other expenses, etc. A manufacturing organization is interested in ascertaining the cost per unit of the product manufactured while an organization rendering services, like transport undertaking, canteen, electricity company and municipality, is interested in ascertaining the costs of the service it renders. In its simplest form, the cost per unit is arrived at by dividing the total expenditure incurred by the total units produced, or the quantum of service rendered. But this method is applicable if the manufacturer produces only one product. If the manufacturer produces more than one product, it becomes imperative to split up the total expenditure among the various products so that the cost of each product can be ascertained separately. Even if only one product is manufactured, it may be necessary to analyze the cost per unit of each item of expenditure that goes into the making of it. The problem becomes more complicated where a multiplicity of products are produced, and it becomes necessary to analyze the cost per unit of each product into various items of expenditures that make up the total cost.

The concept of cost consists of principles and rules governing the procedure of finding out the costs of goods/services. It aims at ascertaining the total cost and also per unit cost. For instance, in transport companies the total cost for the period is ascertained and used to find out the cost per passenger/mile, i.e., the cost of carrying one passenger for one mile. It provides for an analysis of expenditure in such a way that the management gets complete idea about even the smallest item of cost. It is necessary to specify the exact meaning of “cost”. When the term is used specifically, it is modified with such terms as prime cost, fixed cost, sunk cost, etc. Each description implies a certain characteristic which is helpful in analyzing the cost. It helps cost accounting in achieving its three basic objectives, namely, cost ascertainment, cost control and cost presentation.

A cost must always be studied in relation to its purpose and conditions. Different costs may be ascertained for different purposes and under different conditions. Work-in-progress is valued at factory cost, while stock of finished goods may be valued at cost of production. Even if the purpose of the study of cost is the same, different conditions may lead to variation in cost. The cost per unit of a product is sure to vary with an increase in the volume of output since the amount of fixed expenses to be borne by each unit of output decreases. It is also important to note here that there is no such thing as an exact cost or true cost because no figure of cost is true in all circumstances, and for all purposes. Most of the costing information is based on estimates. For example, the amount of overheads is generally estimated in advance; it is distributed over cost units, again on an estimated basis using different methods. Many items of cost of production are handled in an optional manner which may give different costs for the same product without going against the accepted principles in any way. Depreciation is one such item, the amount of which will vary in accordance with the method of depreciation being used. Thus, to arrive at an absolutely correct cost may be quite difficult, unless one waits for a long time unfortunately by which time the costing information may lose all its value.

COSTING, COST ACCOUNTING AND COST ACCOUNTANCY

Costing

Costing is the techniques and processes of ascertaining costs. These techniques consist of principles and rules which govern the procedure of ascertaining cost of products or services. The techniques to be followed for the analysis of expenses and the processes of different products or services differ from industry to industry. The main object of costing is the analysis of financial records, so as to subdivide expenditure and to allocate
Cost Accounting

Cost accounting may be regarded as a specialized branch of accounting which involves classification, accumulation, assignment and control of costs. The costing terminology of C.I.M.A. London defines cost accounting as “The establishment of budgets, standard costs and actual costs of operations, processes, activities or products, and the analysis of variances, profitability or the social use of funds”.

Wheldon defines cost accounting as “classifying, recording and appropriate allocation of expenditure for determination of costs of products or services and for the presentation of suitably arranged data for purposes of control and guidance of management”. It is thus, a formal mechanism by means of which costs of products or services are ascertained and controlled. Cost accounting is different from costing in the sense that the former provides only the basis and information for ascertainment of costs. Once the information is made available, costing can be carried out arithmetically by means of memorandum statements or by the method of integral accounting.

Cost Accountancy

Cost Accountancy has been defined as “the application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability. It includes the presentation of information derived there from for the purpose of managerial decision making”.

Importance & Relevance of Cost Accounting

The limitations of financial accounting have made the management to realize the importance of cost accounting. Whatever may be the type of business, it involves expenditure on labour, materials and other items required for manufacturing and disposing of the product. The management has to avoid the possibility of waste at each stage. It has to ensure that no machine remains idle, efficient labour gets due incentive, by-products are properly utilized and costs are properly ascertained. Besides the management, the creditors and employees are also benefited in numerous ways by installation of a good costing system. Cost accounting increases the overall productivity of an organization and serves as an important tool, in bringing prosperity to the nation. Thus, the importance of cost accounting can be discussed under the following headings:

(a) Costing as an Aid to Management

Cost accounting provides invaluable aid to management. It provides detailed costing information to the management to enable them to maintain effective control over stores and inventory, to increase efficiency of the organization and to check wastage and losses. It facilitates delegation of responsibility for important tasks and rating of employees. For all these, the management should be capable of using the information provided by cost accounts in a proper way. The various advantages derived by the management from a good system of costing are as follows:

1. **Cost accounting helps in periods of trade depression and trade competition**: In periods of trade depression, an organization cannot afford to have losses which pass unchecked. The management must know the areas where economies may be sought, waste eliminated and efficiency increased. The organization has to wage a war not only for its survival, but also for its continued growth. The management should know the actual cost of their products before embarking on any scheme of price reduction. Adequate system of costing facilitates all this.

2. **Cost accounting aids price fixation**: Although the law of supply and demand to a great extent determines the price of the article, cost to the producer does play an important role too. The producer can take necessary guidance from his costing records in case he is in a position to fix or change the price charged.
3. **Cost accounting helps in making estimates**: Adequate costing records provide a reliable basis for making estimates and quoting tenders.

4. **Cost accounting helps in channelizing production on right lines**: Proper costing information makes it possible for the management to distinguish between profitable and non-profitable activities. Profits can be maximized by concentrating on profitable operations and eliminating non-profitable ones.

5. **Cost accounting eliminates wastages**: As cost accounting is concerned with detailed break-up of costs, it is possible to check various forms of wastages or losses.

6. **Cost accounting makes comparisons possible**: Proper maintenance of costing records provides various costing data for comparisons which in turn helps the management in formulation of future lines of action.

7. **Cost accounting provides data for periodical Profit and Loss Account**: Adequate costing records provide the management with such data as may be necessary for the preparation of Profit and Loss Account and balance sheet at such intervals as may be desired by the management.

8. **Cost accounting helps in determining and enhancing efficiency**: Losses due to wastage of materials, idle time spent by workers, poor supervision, etc., will be disclosed if the various operations involved in the production are studied carefully. Efficiency can be measured, costs controlled and various steps can be taken to increase the efficiency.

9. **Cost accounting helps in inventory control**: Cost accounting furnishes control which management requires in respect of stock of materials, work-in-progress and finished goods.

**b) Costing as an Aid to Creditors**

Investors, banks and other money-lending institutions have a stake in the success of the business concern and are, therefore, benefited immensely by the installation of an efficient system of costing. They can base their judgment about the profitability and future prospects of the enterprise on the costing records.

**c) Costing as an Aid to Employees**

Employees too have a vital interest in their employer’s enterprise in which they are employed. They are benefited in a number of ways by the installation of an efficient system of costing. They are benefited due to continuous employment and higher remuneration in the form of incentives, bonus plans, etc.

**d) Costing as an Aid to National Economy**

An efficient system of costing brings prosperity to a business enterprise which in turn results in stepping up of the government’s revenue. The overall economic development of a country takes place as a consequence increase in efficiency of production. Cost control, elimination of wastage and efficiency lead to the progress of industry and consequently of the country as a whole.

**OBJECTIVES OF COST & MANAGEMENT ACCOUNTING**

The objectives of cost accounting are ascertainment of cost, fixation of selling price, proper recording and presentation of cost data to the management for measuring efficiency and work out cost control. The main aim is to know the methods by which expenditure on materials, wages and overhead are recorded, classified and allocated so that the cost of products and services may be accurately ascertained; these costs may be related to sales and profitability may be determined.

The basic objective of management accounting is to assist the management in proper planning, organizing, directing and controlling based on the data available through the Cost Accounting.

Following are the Main Objectives of Cost & Management Accounting:
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1. To ascertain the cost per unit of different products manufactured by a business concern;
2. To provide a correct analysis of cost by finalizing process, operations and by different elements of cost;
3. To disclose sources of wastage of material, time or expense, or in the use of machinery, equipments and tools, and to prepare such reports as may be necessary to control such wastage;
4. To provide requisite data and serve as a guide for fixing prices of products manufactured, or services rendered;
5. To ascertain the profitability of each of the products and advise management as to how these profits can be maximized;
6. To exercise effective control on the stocks of raw materials, work-in-progress, consumable stores and finished goods in order to minimize the capital locked up in these areas;
7. To reveal sources of economy by installing and implementing a system of cost-control for materials, labour and overheads;
8. To advise the management about future expansion policies and proposed capital projects;
9. To present and interpret data for management planning, evaluation of performance and control;
10. To help in the preparation of budgets and implementation of budgetary control;
11. To organize an effective information system so that different levels of management may get the required information at the right time in right form for carrying out their individual responsibilities in an efficient manner;
12. To guide the management in the formulation and implementation of incentive bonus plans based on productivity and cost savings;
13. To supply useful data to the management for taking various financial decisions, such as introduction of new products, replacement of labour by machine etc.;
14. To help in introduction and, supervising biometric as, accounting or data processing through computers;
15. To organize the internal audit system to ensure effective working of different departments;
16. To organize cost-reduction programmes with the help of different departmental managers;
17. To provide specialized services of cost-audit in order to prevent the errors and frauds, and to facilitate prompt and reliable information to management; and
18. To work out profit or loss to the company by identifying with revenues the costs of those products or services whose sells have resulted into profits.

SCOPE OF COST & MANAGEMENT ACCOUNTING

The scope of Cost and Management Accounting is very vast because it first ascertains the cost of products, and services rendered, and later on provides this information to the management for financial analysis and interpretation of the business operations.

Described below is the scope of Cost & Management Accounting:

1. **Cost Ascertainment:** Cost Accounting helps in the determination of the cost of a product, and how to control it thus it helps the company in making appropriate. It makes use of both past and present data for ascertainment of product cost. There is no specific format for the preparation of cost accounting statements.

2. **Helpful to Internal Management of the Company:** It is used by the internal management of the company and usually the cost accountant prepares this to ascertain the cost of a particular product
taking into account the cost of materials, labour and several overheads. No certain periodicity is needed for the preparation of these statements and they are needed as and when required by the management.

3. **Formation of Rules & Regulation**: This makes use of certain rules and regulations while computing the cost of different products in different industries.

4. **Proper matching of cost with revenue**: In cost accounting the manager prepares monthly or quarterly statements which reflect the cost and income data identified with the sale of that period.

5. **Aids to Management Decision-making**: Decision-making is a process of choosing between two or more alternatives, offer deliberating on the outcome of various choices. A Cost Benefit Analysis also needs to be done. All this can be achieved through a good cost accounting system.

6. Cost accounting involves the preparation of budgets and making of, come out with forecasts to make viable and valuable decisions for the future. Many decisions are taken based on the projected figures of the.

7. There are no set of rules and regulations to be followed while preparing these statements but the management can set their own principles. In management accounting there is no specific time span for its statement and report preparation. It makes use of both cost as well as financial statements to analyze the data.

**ELEMENTS OF COST**

The elements that constitute the cost of manufacturing are known as the elements of cost. Such elements of cost are divided into three categories. In a manufacturing concern raw materials are converted into a finished product with the help of labour and other service units.

There are three broad elements of costs:

1. **Material**
   - The substance from which the product is made is known as material. It can be direct as well as indirect.

   ![Material Diagram]

   - **Direct material**: It refers to those materials which are a major part of the finished product and can be easily traceable to the units. Direct materials include:
     1. All materials specifically purchased for a particular job/process.
     2. All material acquired and later requisitioned from stores.
     3. Components purchased or produced.
     4. Primary packing materials.
     5. Material passing from one process to another.

   - **Indirect material**: All material used for ancillary purposes in production and which can be conveniently assigned to specific physical units are termed as indirect materials. Examples, oil, grease, consumable stores, printing and stationary material, etc.
(2) Labour:
Labour cost can be classified into direct labour and indirect labour.

- **Direct labour**: It is defined as the wages paid to workers who are engaged in the production process and whose time can be conveniently and economically traceable to units of products. For example, wages paid to compositors in a printing press, to workers in the foundry in cast iron works, etc.

- **Indirect labour**: Labour employed for the purpose of carrying tasks incidental to goods or services provided is indirect labour. It cannot be practically traced to specific units of output. Examples, wages of store-keepers, foreman, time-keepers, supervisors, inspectors, etc.

(3) Expenses:
Expenses may be direct or indirect.

- **Direct expenses**: These expenses are incurred on a specific cost unit and identifiable with the cost unit. Examples are cost of special layout, design or drawings, hiring of a particular tool or equipment for a job, fees paid to consultants in connection with a job, etc.

- **Indirect expenses**: These are expenses which cannot be directly, conveniently and wholly allocated to cost centre or cost units. Examples are rent, rates and taxes, insurance, power, lighting and heating, depreciation, etc.

It is to be noted that the term overheads has a wider meaning than the term indirect expenses.

Overheads include the cost of indirect material, indirect labour and indirect expenses. Overheads may be classified as

(a) Production or manufacturing overheads
(b) Administration overheads
(c) Selling overheads
(d) Distribution overheads.
Material is a very important factor of production. It includes physical commodities used to manufacture the final end product. It is inventoriable and does not get waste and exhausted with the passage of time, as labour is wasted with the passage of time, whether in use or not.

Material cost constitutes a major proportion of the total cost of the product. All products are made up of one or many materials. So the accurate determination of material cost may be direct material cost or indirect material cost.

Whenever a product/component is manufactured out of a material some portion of it goes as waste/scrap in the form of chips, risers, etc. In addition to this some components/parts may not meet the final specifications essentially needed, such as surface finish, dimensions and surface hardness, etc., and are therefore rejected in the final inspection process, thus leading to scrap.

Hence, the material cost chargeable to a component is that in the pre-manufacturing or rough state (i.e., raw material). It includes all scrap removed during manufacturing process. Mensuration is used to calculate area and volume of the component/parts or products.

Procedure for Estimation of Material Cost:

The procedure for estimation of material cost is as follows:

1. Break up the final product into simple parts so that their areas and volumes can be calculated easily.
2. Neglect small fillets and rounded comers but take into consideration scrap involved. Suitable approximations whenever necessary may be adopted.

3. By applying the formulas of mensuration calculate area and volume of each part.

4. In order to determine the volume of the product, add the volumes of the all parts calculated above in step 3.

5. In order to calculate weight of the material constituting the product, multiply the product volume by the density of the material of which the product is made.

6. Lastly determine the material cost by multiplying the cost per unit weight to the weight of material. Following table gives the densities of some materials used in production required for estimation of weight of material.

## Aspects of Material Control

There are two aspects of material control:

1. **Accounting aspect:** This aspect of material control is concerned with maintaining documentary evidence of movement of materials of every stage right from the time sales and production budgets are approved to the point when materials are purchased and actually used in production operation.

2. **Operational aspect:** This aspect of material control is concerned with the maintenance of material supplies at a level so as to ensure that material is available for use in production and production services as and when required by minimizing investment in materials.

## Objectives of Material Control

Scientific control of materials should serve the following purposes:

(i) To provide continuous flow of required materials, parts and components for efficient and uninterrupted flow of production;

(ii) To minimize investment in inventories keeping in view operating requirements;

(iii) To provide for efficient store of materials so that inventories are protected from loss by fire and theft, and handling time, and cost are kept at a minimum;

(iv) To keep surplus and obsolete items to minimum.

It might seem obvious that inventory control remains efficient as long as material level goes down. Materials should increase or decrease in amount and time as related to sales requirements and production schedules. Responsibility for control of materials is that of the top management, though decisions in this regard might well be based upon the combined judgment of the production manager, controller, the sales manager and the purchasing manager. This is desired in view of the financial considerations involved in the problem and also because of the need for coordinating the different kinds of materials and conflicting view points of different departments. For example, sales manager, purchasing executive and production manager usually favour, though for different reasons, the policy of carrying larger amount of stocks, whereas the financial manager will prefer to keep investment in material at the lowest possible level. However, in a large number of organizations material control is generally made the specific responsibility of purchasing department.

## Essentials of Material Control

1. There should be proper cooperation and coordination among the departments involved in purchasing, receiving and inspecting, storage, sales, production and accounting so that there may be no inadequate availability of materials which may disrupt production and lose sales.

2. Purchases of materials should be centralized.

3. There should be proper scheduling of materials.
4. A good method of classification and codification of materials should be followed.

5. There should be proper inspection of materials when they are collected by the receiving department.

6. Standard forms for requisitions, orders, issue, transfer of material from one job to another, and transfer of material from the job to the stores should be used done with India care.

7. The storage of materials should be well planned to avoid loses.

8. A good method of issuing the of materials to various job orders or processes should be followed so that there is delivery of right type of material.

9. Perpetual inventory system of material should be operated to facilitate regular checking and avoiding closing down factory for stock-taking.

10. A system of internal check should be introduced to ensure that all transactions involving materials are checked by fully authorized and independent persons.

11. Minimum, maximum and reordering levels for each type of material should be fixed to ensure that there is no shortage of materials.

12. Ordering quantity for each type of material should also be fixed to reduce the ordering cost and carrying cost of materials should also be kept under check.

13. Adequate records to control materials during production should be maintained to ensure that there is minimum possible wastage.

14. Information about availability of materials should be made continuously available to the management so that planning of production may be done properly.

**LABOUR COST**

Labour cost is a second major element of cost specially in an organization where using more manual operators are involve. Proper control and accounting of labour cost is one of the most important problems of a business enterprise. It is the cost of human endeavour in the product and requires coordinated efforts for its control. The management objective of keeping labour cost as low as possible is achieved by balancing productivity with wages. Low wages do not necessarily mean low labour cost. Low labour cost is possible by giving substantial increase in wages against corresponding increase in productivity. The gain is reflected in labour cost as well as in overheads expense per unit, since overheads are distributed over larger volumes. Again, the productivity of labour is quite flexible. Given right type of motivation and incentive, it can reach amazing scale. It does not have any limitation like machines. Labour cost is a vital factor not only affecting the cost of production but also industrial relations of the organization. No organization can expect to attract and attain qualified and motivated employees unless it pays them fair remuneration. Employee remuneration therefore influences vitally the growth and profitability of the company. For employees remuneration is more than a means of satisfying their physical needs. Wages and salaries have significant influence on our distribution of income, consumption, savings, employment and prices. Thus employee remuneration is a very significant issue from the viewpoint of employer’s employees and the nation as whole.

**Classification of Labour Cost**

The total labour cost can be classified as follows:

(a) Direct labour costs;

(b) Indirect labour costs.

(a) Direct Labour Cost

It refers to all labour expended in altering the construction, composition, conformation or condition of the product. The wages paid to skilled and unskilled workers for their task labour can be allocated specifically according to the particular product or the process as the case may be. In any manufacturing process or department, the workers employed generally belong to following of manufacturing two categories:
(i) Those who are directly engaged with the production, or in the carrying out of an operation or process;
(ii) Those who are assisting in the process by supervision looking after maintenance transportation of materials, etc. category.

The workers coming under the first category belong to direct labour and the wages paid to them are called direct wages. In a factory, where production of a number of products is undertaken or in a jobbing concern, workers are given job cards on which they note the time devoted to each job or product. These job cards are then analyzed jobwise so that the wages attributable to each job can be computed.

Direct labour cost is that portion of wages or salaries which can be identified with and charged to a single costing unit. It can be easily identified with and charged to a single costing unit as there is a direct relationship with the product/process. Direct labour cost can be easily calculated and is quite significant in amount.

Example: Labour engaged in making the bricks in a kiln is a direct labour because labour charges paid for making 1,000 bricks can be conveniently allocated to the cost of 1,000 bricks.

(b) Indirect Labour Costs

It refers to labour expended that does not alter the construction, conformation, composition or condition of the product, but which contributes generally to such work and to the completion of the product and its progressive movement and handling it to the point of dispatch. In other words, labour employed for the purpose of carrying out tasks incidental to goods produced or services provided is regarded as an indirect labour.

Indirect labour costs are not easily identifiable with particular units. Indirect labour cost can be classified into two category. One expended in production departments and the other in service departments. (bulk of the labour cost in a production department will be direct). The classification enable control over surplus costs.

Example : Wages or salaries paid to foremen, supervisors, inspectors, clerks, storekeepers, managers, accountants, salesmen, directors, etc., are examples of indirect labour cost.

Need for distinguishing between direct and indirect labour costs :

This distinction has to be made

- (a) for calculating accurate labour cost and thus providing a basis for strict control;
- (b) for facilitating calculation of labour efficiency;
- (c) for proper allocation of overheads;
- (d) for introduction of incentive schemes;
- (e) for interunit comparison; and
- (f) for estimating total labour costs.

Accounting and Control of Labour Cost

Accounting for labour by a manufacturer usually involves three activities:

1. Time-keeping;
2. Computation of total payroll; and
3. Allocation of payroll costs.

These activities must be performed before the payroll is recorded in the accounting records. In a large organization, the control of labour cost involves the coordinated efforts of the following departments:

- (a) **Personnel department** – This department is responsible for the planning of manpower, recruitment, training, maintaining records of staff and workmen, reporting to chief inspector of factories and top management on the performance of the labour overtime, absenteeism, leave, etc.
(b) **Industrial engineering department** – This department prepares plans and specifications for each job, supervises production activities, undertakes time and motion studies, performs job analysis, etc.

(c) **Time-office** – This department is primarily responsible for the collection of data relating to attendance, time spent on jobs or process by the workmen, and providing information on attendance and leave to payroll department.

(d) **Payroll department** – This department is responsible for computing total and net earnings of each worker, preparation of payroll and maintenance of various records relating to payroll.

(e) **Cost department** – This department collects and classifies all cost data relating to labour utilization by departments, and allocates them to respective job or process as per available documents.

### Time Recording

Recording of time has two purposes - time-keeping and time-booking. It is necessary for both type of workers: direct and indirect. It is necessary even if the workers are paid on piece-basis. Time-keeping is necessary for the purpose of recording attendance and calculating wages. Time-booking means a record from the utilization point of view; the purpose is cost analysis and cost apportionment. Record-keeping is correct when time-keeping and time-booking tally.

### Time-Keeping

The purpose of time-keeping is to provide basic data for:

(i) payroll preparation;

(ii) finding out the labour cost for a job/product/service;

(iii) attendance records to meet statutory requirements;

(iv) determining productivity and controlling labour cost;

(v) calculating overhead cost of a job, product or service;

(vi) maintaining discipline in attendance;

(vii) distinguishing between normal and overtime, late attendance and early leaving; and

(viii) providing internal check against dummy workers.

The time-keeping office records the attendance of workers. Depending on the number of workers, a separate department may be established or it may form part of the personnel department.

Wages paid on the piece-rate basis also require that attendance be recorded for the following reasons:

(a) Records of attendance is necessary for statistical purposes.

(b) If overhead rates are based on labour rates, time recording is necessary.

(c) Output will decrease if attendance is unchecked. Labour spend may be more idle time, and may not follow the production schedules.

(d) If some workers are not punctual it is bonus to affect the morale of other workers.

(e) It is necessary to ensure that production hours judiciously utilized.

(f) It provides data for calculating bonus and overtime.

(g) Labour costs can be allocated on this basis.

(h) For calculating dearness allowance, it is necessary.

(i) For ascertaining payment under certain schemes of benefits, e.g., P.F., Pension, etc. it is essential.

(j) For calculating leave with pay, etc. again it is important.
Expenses may be defined as “the costs of services provided to an undertaking and the notional costs of the use of owned assets”. Direct expenses are those expenses which are directly chargeable to a job account. There are easily identifiable and attributable to the individual units or jobs. All expenses other than the direct material or direct labour which are incurred for a particular product or process are termed as direct expenses. Expenses which can be identified with a territory, a customer or product can be considered as direct expenses. Expenses in relation to a department may be direct, but are indirect in relation to the product.

Direct expenses are defined as “costs, other than materials or wages, which are incurred for a specific product or salable service.”

There is no hard and fast rule regarding the classification of expenses into direct and indirect expenses. Direct expenses are specific charges directly attributable, while the indirect expenses are apportioned on suitable basis. Some items by nature are direct but treated as Indirect because the amounts chargeable are either of small or negligible value, it becomes a difficult and a costly affair to analyze them. Therefore, we treat them as indirect expenses, e.g., nuts, screws, thread, glue, etc. Nature of direct expenses is directly attributed to cost unit/cost center. It includes all direct cost except the direct material and direct labour.

Types of Direct Expenses are as under:

(i) Royalties, if it is charged as a rate per unit.
(ii) Hire charges of the plant if it is used for a specific job.
(iii) Subcontract or outside work, if jobs are sent out for some kind of special processing.
(iv) Salesman’s commission, if it is based on the value of units sold.
(v) Freight if the goods are handled by an outside carrier whose charges can be related to individual units.
(vi) Travelling, hotel and other incidental expenses incurred on a particular contract.
(vii) Cost of making a design or a pattern for a specific job.
(viii) Cost of any special process not forming part of the normal manufacture like water proofing for canvas cloth.

Accounting Treatment of Direct Expenses

Direct expenses are chargeable expenses and are debited to Direct Expenses Account in financial books.

The term ‘direct expenses’ has been excluded from prime cost as per latest CIMA terminology, i.e., according to CIMA, prime cost is “the total cost of direct material and direct labour”.

Accounts are prepared in columnar form so that the analysis can be made and the expenses can be related to the specific job/contract. In cost-accounting records, the direct expenses account is credited and the concerned account is debited. The cost department should verify from the accounts department that the expenses are properly booked. These expenses are not be mixed up with overheads.

Control of Direct Expenses

Items under this head are few. They form a small part of the total cost. Such costs are controlled by fixing some standards. The actual should be compared with these standard. The causes of variations, if any, may be ascertained, and necessary corrective action should be taken.
INDIRECT EXPENSES

Indirect expenses are otherwise the direct ones. These refer to those expenses which cannot be directly, conveniently and wholly allocated to cost centres or cost units. E.g. factory rent & insurance, power, general repairs, etc. Nature of indirect expenses or costs are "those which are incurred for common or joint objectives, and therefore cannot be identified readily and specifically with a particular cost unit/cost centre.

A few examples of such expenses are as follows:

(i) Rent, rates and insurance of factory and office.
(ii) Depreciation, repairs and maintenance of plants, machinery, furniture, building, etc.
(iii) Power, fuel, lighting, heating of factory and office.
(iv) Advertising, legal charges, audit fees, bad debts, etc.

Expenses excluded from costs

The following types of items are not included in cost of production or sales:

(a) Matters of pure finance including interest paid or received, dividend received on investments, rent received, profit or loss on sale of investments or company's property, transfer fees received, etc.
(b) Appropriation of profits including income-tax paid, dividends paid, transfer to sinking fund, general reserves, excessive depreciation, goodwill or other fictitious, assets written off, etc.

Notional Expenses

Expenses that are usually incurred should be included in costs even if a particular firm is not required to pay for such expenses. Rent for own premises is an example. If a firm occupies its own buildings, it does not pay any rent for it, but for costing purposes, an appropriate amount of rent is be included in costs.

Accounting Treatment of Indirect Expenses

Indirect expenses may or may not be allocated. For example, office administrative costs are indirect expenses, but they are rarely allocated to anything, unless it is corporate overhead and is being allocated to subsidiaries. These types of indirect expenses are charged to the expense in the period incurred. Indirect expenses that are factory overheads will be allocated to those units produced in the factory during the same period that the indirect expenses were incurred, and so will eventually be charged to expense when the products to which they were allocated are sold.

OVERHEADS

Overheads may be defined as the cost of indirect material, indirect labour and such other expenses, including services, which cannot be conveniently charged direct to specific cost centres or cost units. It should be noted that direct costs(materials, labour, etc.) are associated with individual jobs or products. Indirect expenses or overheads are not associated with individual jobs or products; they represent the cost of the facilities required for carrying on the operations.

CIMA, London defines overheads as "Expenditure on labour, materials or services which can not be economically identified with a specific saleable cost unit".

In modern industrial undertakings, overheads are a very large proportion of the total cost and, therefore, good deal of attention has to be paid to them. It will be a big mistake to pay attention only to direct cost. The problem in respect of overheads arises from the facts that the amount of overheads has to be estimated and that too before the concerned period begins (since it is only continuous costing that is found useful) and the amount has to be distributed over the various cost units, again on an estimated basis.

Collection of Overheads

When classification of overheads on some scientific and consistent basis is complete, they are regularly collected, i.e., estimated understanding order codes allotted to them. In order to collect overhead expenses the following are some of the primary documents used:-
(i) Stores requisitions

(ii) Job cards or tickets

Indirect materials originate in store requisitions. Each store requisitions note specifies the standing order number and the department for which the materials are drawn from stores. The departmentalization is done at the sources level. A material-issue analysis sheet is prepared from store requisitions. At the end of each month, the total of these items is charged or debited to Factory Overhead Control Account and credited to Stores Ledger Control Account.

Indirect labour is obtained in the first place from the time cards and payrolls. Wages paid to workers against each standing order number can be obtained from the time-tickets or job cards. From the time-tickets, the wages analysis sheet is prepared each month and at the end of the month, the total is debited to Factory Overhead Control Account and credited to the Wages account.

Indirect expense can come from several sources, such as cash book, factory journals or vouchers. In the case of cash outlays, the entry may come from the cash book. Expenses such as depreciation and other adjustment items which do not result from cash outlays are taken from subsidiary records. At the end of the period, the total of factory overheads would be debited to Factory Overhead Control Account and credited to the Cost Ledger Control Account.

Some expenses done one such as power, lighting, heating, rent, etc. may not be solely applicable to factory overheads, but should be apportioned between factory expenses, selling expenses and administration expenses. Each item of overheads may be seen and proper estimate of the amount for the coming period may be prepared. Another more expeditious way is to analyze total overheads into fixed and variable expenses, then arrive at an estimate by adjusting the variable amount Rs. per the expected change in output and in the fixed amount by recruiting more people and giving more increments, etc.

Classificaion Of Overheads

Cost classification is the process of grouping costs according to their common characteristics and than establishing a series of special groups according to which costs have been classified. The process of classification of overheads involves:

(a) the determination of the classes or groups in which the costs are subdivided; and

(b) the actual process of classification of the various items of expenses into one or another of the groups.

The classification of overheads expenditure depends upon the type and size of a business and the nature of the product or service rendered.

Generally overheads are classified on the following basis:

(1) Functional analysis

(2) Behavioural analysis

1. Functional Analysis

Overheads can be divided into the following categories on functional basis:

(a) Manufacturing or production or factory overheads: Manufacturing overheads includes all indirect costs (indirect material, indirect labour and indirect expenses) incurred for operation of manufacturing or production division in a factory. It is also known as factory overheads, works overheads, factory cost or works cost, etc.

(b) Administration overheads: It is the sum of those costs of general management, secretarial, accounting and administrative services which cannot be directly related to production, marketing, research or development functions of the enterprise. Administration overheads include the cost of formulating the policy, directing the organization and controlling the operations of an undertaking which is not related directly to production, selling, distribution, research or development activity or function.
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(c) Selling and distribution overheads: Selling overheads is the cost of seeking to create and stimulate demand and of securing orders. It comprises the cost of products to distributors for soliciting and recurring orders for the articles or commodities dealt in and of efforts to find and retain customers. Distribution overhead is the expenditure incurred in the process which begins with making the packed product available for dispatch and ends with the making the reconditioned returned empty package, if any, available for reuse. It includes expenditure incurred in transporting articles to central or local storage. It also comprises expenditure incurred in moving articles to and from prospective customers as in the case of goods on sale or on return basis. In case of gas, electricity and water industries distribution means pipes, mains and services which may be regarded as equivalent to packing and transportation.

(d) Research and development overheads: Research overhead is incurred for a new product or a new process of manufacturing any product. The development overhead is incurred for putting research result on commercial basis.

2. Behavioural Analysis

Under this overheads are classified, depending on their tendency to vary with the production/sales volume or activity levels. Some expenses vary directly with the rise and fall in the output, some remain constant inspite of change in the activity of the concern, whereas there are some other items which are constant only up to a certain level and then change their character to become a variable or vary with the volume of output though less proportionately.

Based on this behaviors, the expenses may be classified into:

(a) Fixed Overhead

(b) Variable Overhead

(c) Semi-Variable Overhead

COST SHEET

Cost Sheet is statement designed to show the output of a particular accounting period along with break-up of costs. The data incorporated in cost sheet are collected from various statements of accounts which have been written in cost accounts, either day to day or in regular records.

There is no fixed form for the preparation of cost sheet, but in order to make the cost sheet more useful, it is generally presented in columns form. The columns show the total cost, per unit for the current period, total cost & per unit cost for a preceding period and total and per unit cost for the budget period. Cost Sheet is a Memorandum Statement.

Advantages of the cost sheet:

1. It discloses the total cost & the cost per unit of the units produced during a given period.
2. It enables a manufacturer to keep a close watch & control over the cost of production.
3. By providing a comparative study of the various elements of current cost with the past results & standard costs, it is possible to find out the causes of variations in costs & to eliminate the adverse factors & conditions which increase the total cost.
4. It acts as a guide to the manufacturer & helps him in formulating a definite useful production policy.
5. It helps in fixing up the selling price more accurately.
6. It helps businessmen to minimize the cost of production when there is a cut throat competition.
7. It helps businessmen to submit quotations with reasonable degree of accuracy against tenders for the supply of goods.

Preparation of Cost Sheet

Cost sheet is one of the method of unit costing. The format of cost sheet is as under:-
### Cost Sheet for the Period_______________

**Production __________ Units**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Total Cost</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening Stock of Raw Material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Purchase of Raw materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Purchase Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Closing stock of Raw Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw Materials Consumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Wages (Labour)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Charges</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prime cost (1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Factory Over Heads:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory Rent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory Power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Wages Supervisor Salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing Office Salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory Insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory Asset Depreciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Works cost Incurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Opening Stock of WIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Closing Stock of WIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Works cost (2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Administration Over Heads:-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Rent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset Depreciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Charges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Charges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counting house Salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Office Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Production (3)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Opening stock of Finished Goods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Closing stock of Finished Goods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Selling and Distribution OH:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales man Commission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales man salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traveling Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery man expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Tax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad Debts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cost of Sales (5) |
| Sales |

**Notes:**

1. Factory Over Heads are recovered as a percentage of direct wages
2. Administration Over Heads, Selling and Distribution Overheads are recovered as a percentage of works cost.

### LESSON ROUND UP

- Cost is the amount of resource given in exchange for some goods or services.

- The Chartered Institute of Management Accountants, London defines cost as “the amount of expenditure (actual or notional) incurred on or attributable to a specified thing or activity”.

- Cost is the amount of expenditure (actual or notional) incurred on, or attributable to a specified thing or activity.

- Cost accounting is the establishment of budgets, standard costs and actual costs of operations, processes, activities or products, and the analysis of variances, profitability or the social use of funds.

- Cost centre means, a production or service location, function, activity or item of equipment whose costs may be attributed to cost units.

- Cost unit is a unit of product or service in relation to which costs are ascertained.

- Cost accounting increases the overall productivity of an organization and serves as an important tool, in bringing prosperity to the nation.

- The objectives of cost accounting are ascertainment of cost, fixation of selling price, proper recording and presentation of cost data to the management for measuring efficiency and for cost control.

- The Scope of Cost and Management Accounting is very wide and broad because it first ascertains the cost of the product and services rendered, and later on provides this information to the management for financial analysis and interpretation of the business operation.

- There are three Elements of cost: Material, Labour, Expenses which are further divided into direct and indirect cost.

- Direct Material, Direct Labour and Direct Expenses when combined together are known as Prime Cost.
Indirect Material, Labour and Expenses when combined together are termed as Overheads.

Overheads are further classified under two heads: Based on Functional Analysis and Behavioural Analysis.

Based on Functional Analysis Overheads are classified under four categories. Manufacturing OH, Administration OH, Selling & Distribution OH and Research & Development OH.

Material cost constitutes a major proportion of the total cost of the product. All products are made up of one or many materials.

The material cost chargeable to a component is the one which is in pre-manufacturing or rough state (i.e., raw material). It includes all scrap removed during manufacturing process.

Labour is the cost of human endeavour in the product and requires coordinated efforts for its control.

The management objective of keeping labour cost as low as possible is achieved by balancing productivity with wages.

Low wages do not necessarily mean low labour cost.

Expenses may be defined as “the costs of services provided to an undertaking and the notional costs of the use of owned assets”.

Direct expenses are those expenses which are directly chargeable to a job account.

Overhead may be defined as the cost of indirect material, indirect labour and such other expenses, including services, as cannot be conveniently charged direct to specific cost centres or cost units.

Direct costs (materials, labour, etc.) are associated with individual jobs or products.

Indirect expenses or overheads are not associated with individual jobs or products; they represent the cost of the facilities required for carrying on the operations.

Cost Sheet is the statement designed to show the output of the particular accounting period along with breakup of costs.

**SELF TEST QUESTIONS**

1. Distinguish between costing and cost accounting or do you think costing’ and ‘cost accounting’ are the same.
2. Define costing and discuss the objectives of cost accounting. What methods of costing are used in cost accounting?
3. State the advantages that may be derived from a sound system of cost accounting.
4. What do you mean by elements of cost? Discuss the various elements of cost.
5. “Management accounting is concerned with accounting information which is useful to management”. Comment.
6. It is contended that competition governs prices and that where production efficiency is good; there is no need for a proper system of costing. What arguments would you advance to elucidate this opinion?
7. Discuss the meaning & advantages of Cost Sheet. Explain with the help of specimen of cost sheet.
8. What do you mean by overhead? Explain the different types of overheads with examples.
9. Define indirect manufacturing costs under traditional cost accounting. List some examples of indirect manufacturing costs?
10. If we suppress a product line, do we change the total costs per unit in the remaining product lines, or do they stay the same? Give reasons.
Lesson 14
Cost Accounting Records & Cost Audit under Companies Act, 2013

LESSON OUTLINE

– Introduction
– Rule 1: Short Title & Commencement
– Rule 2: Definitions
– Cost Record
– Rule 3: Application of Cost Record
– Rule 4: Applicability for Cost Audit
– Rule 5: Maintenance of Cost Record
– Rule 6: Cost Audit
– Purpose of Cost Audit
– CRA-1: Forms in which Cost Records shall be maintained
– CRA-2: Form of Intimation of Appointment of Cost Auditor by the Company to Central Government
– CRA-3: Form of Cost Audit Report
– CRA-4: Form for filing Cost Audit Report with the Central Government
– LESSON ROUND UP
– SELF TEST QUESTIONS

LEARNING OBJECTIVES

The Companies Act, 2013 empowers the Central Government to make the rules so that companies engaged in specified industries, manufacturing, providing goods and rendering services are compelled to maintain their cost records by getting them audited. Qualified Cost Accountant are hired to maintain cost accounting records and auditing. The Government’s objective is to ensure that companies keep proper records. Its aim is to inculcate a culture of cost consciousness among industries for better resource management. The Government wants to make efficient audit possible so that all cost data is available to it.

The objectives of this lesson are to enable students to understand the meaning of cost accounting records, the purposes for which cost records are maintained, meaning of cost audit, various techniques used in cost audit and what is the applicability for cost audit etc. The study of this lesson will help them to understand the nature, scope and utility of cost accounting records and cost audit based on different rules applicable.
INTRODUCTION

The Companies Act, 2013 empowers the Central Government to make the rules so that companies engaged in specified industries, manufacturing, providing goods and rendering services are compelled to maintain their cost records by getting them audited, vide Section 148.

Thus, it is the "subordinate legislative power" of the Central Government to make rules for maintenance of cost records and audit thereof with respect to specific industries. Accordingly, the Central Government has made, from time to time, several notifications/orders, ever since the provisions were made in the erstwhile Companies Act, 1956, as well as under the current Act of 2013.

RULE 1: SHORT TITLE AND COMMENCEMENT

(1) These rules may be called the Companies (Cost Records and Audit) Rules, 2014.

(2) They shall come into force from the date of their publication in the Official Gazette issued on 30.06.2014.

RULE 2: DEFINITIONS

In these rules, unless the context otherwise requires -

(a) "Act" means the Companies Act, 2013 (18 of 2013);

(aa) "Central Excise Tariff Act Heading" means the heading as referred to in the Additional Notes in the First Schedule to the Central Excise Tariff Act, 1985 (5 of 1986);

(b) "Cost Accountant in practice" means a cost accountant as defined in clause (b) of sub-section (1) of Section 2 of the Cost and Works Accountants Act, 1959 (23 of 1959), who holds a valid certificate of practice under Sub-section (1) of Section 6 of that Act and who is deemed to be in practice under Sub-Section (2) of Section 2 thereof, and includes a firm or limited liability partnership of cost accountants;

(c) "Cost Auditor" means a Cost Accountant in practice, as defined in clause (b), who is appointed by the Board;

(d) "Cost Audit Report" means the duly signed Cost Auditor’s report on the cost records examined and cost statements which are prepared as per these rules, including attachment, annexure, qualifications or observations attached with or included in such report;

(e) "Cost Records" means books of account relating to utilization of materials, labour and other items of cost as applicable to the production of goods or provision of services as provided in Section 148 of the Act and these rules;

(f) "Form" means a form annexed to these rules;

(g) "Institute" means the Institute of Cost Accountants of India constituted under the Cost and Works Accountants Act, 1959 (23 of 1959);

(h) All other words and expressions used in these rules but not defined, and defined in the Act or in the Companies (Specification of Definition Details) Rules, 2014 shall have the same meanings as assigned to them in the Act or in the said rules.

COST RECORD

As per Rule 2(e) the Companies (Cost Records and Audit) Rules, 2014, "Cost Records" means books of account relating to utilization of materials, labor and other items of cost as applicable to the production of goods or provision of services under the provisions of Section 148 of the Act. It is mandatory to keep the cost records for proper supervision and control.
Every company specified in item (A) of rule 3 shall get its cost records audited in accordance with these rules if the overall annual turnover of the company from all its products and services during the immediately preceding financial year is rupees fifty crore or more as the aggregate turnover of the individual.

**RULE 3: APPLICATION OF COST RECORDS**

For the purposes of Sub-Section (1) of Section 148 of the Act, the class of companies, including foreign companies defined in clause (42) of Section 2 of the Act, engaged in the production of the goods or in rendering services, having an overall turnover from all its products and services of rupees thirty five crore or more during the immediately preceding financial year, shall include cost records for such products or services in their books of account.

**DIAGRAMMATICAL REPRESENTATION**

- Overall Turnover from all of its products & Services >= Rs 35 crore (Preceding Financial Year)
- Engaged in Production of Goods or Providing Services
- Regulated & Non-Regulated Sector
- Listed in Table of Rule 3
- Domestic or Foreign Company
- Applicability for Maintenance of Cost Records

**Companies Engaged in the Production of following Goods or providing following Services :**

**(A) Companies Engaged in Strategic Sectors**

(i) Machinery, mechanical appliances used in defence, space and atomic energy sectors such as: (A) Nuclear reactors; fuel elements (cartridges), non-irradiated, for nuclear reactors; machinery and apparatus for isotopic separation (B) Steam or other vapour generating boilers (other than central heating hot water boilers capable also of producing low pressure steam); super-heated water boilers (C) aircraft, spacecraft and parts thereof (D) ships, boats and floating structures;

(ii) Turbo jets and turbo propellers;

(iii) Arms and ammunition;

(iv) Propellant powders; prepared explosives, (other than propellant powders); safety fuses; detonating fuses; percussion or detonating caps; igniters; electric detonators;

(v) Radar apparatus, radio navigational aid apparatus and radio remote control apparatus;

(vi) Tanks and other armoured fighting vehicles, motorized, whether or not fitted with weapons and parts of
such vehicles that are funded (investment made in the company) to the extent of 90% or more by the Government or Government Agencies;

(B) Companies Engaged in an Industry Regulated by a Sectoral Regulator or a Ministry or Department of Central Government

(vii) Port services of stevedoring, pilotage, hauling, mooring, remooring, hooking, measuring, loading and unloading services rendered by a Port in relation to a vessel or goods regulated by the Tariff Authority for Major Ports under Section 111 of the Major Port Trusts Act, 1963;

(viii) Aeronautical services of air traffic management, aircraft operations, ground safety services, ground handling, cargo facilities and supplying fuel, etc., rendered by airports and regulated by Airports Economic Regulatory Authority (“AERA aeronautical”) under the Airports Economic Regulatory Authority of India Act, 2008;

(ix) Telecommunication services made available to users by means of any transmission or reception of signs, signals, writing, images and sounds or intelligence of any nature (other than broadcasting services) and regulated by the Telecom Regulatory Authority of India (“TRAI”) under the Telecom Regulatory Authority of India Act, 1997;

(x) Generation, transmission, distribution and supply of electricity regulated by the Central Electricity Regulatory Commission (CERC) under The Electricity Act, 2003, other than for captive generation (as defined under The Electricity Rules);

(xi) Roads and other infrastructure projects that are recipients of concessions;

(xii) Active pharmaceutical ingredients or bulk drugs & formulations;

(xiii) Fertilizers under administered price mechanism (urea) or subsidized;

(xiv) Sugar and industrial alcohol;

(xv) Petroleum products under administered price mechanism (Diesel, PDS Kerosene, Domestic LPG and Cooking Gas) or subsidized;

(C) Other Companies

(xvi) Railway or Tramway locomotives, rolling stock, railway or tramway fixtures and fittings, mechanical (including electro mechanical) traffic signaling equipment’s of all kind;

(xvii) Mineral products;

(xviii) Ores;

(xix) Mineral Fuels, mineral oils;

(xx) Base metals;

(xxi) Inorganic chemicals, organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or isotopes;

(xxii) Aircraft, spacecraft that are funded (investment made in the company) to the extent of 90% or more by the Government or Government Agencies;

(xxiii) Vehicles, aircraft, vessels and associated transport equipment, that are funded (investment made in the company) to the extent of 90% or more by the Government or Government Agencies;
(xxiv) Jute and Jute Products;

(xxv) Edible Oil under Administrative Price Mechanism;

(xxvi) Construction Industry where there is any government concession or grant in any form;

(xxvii) Provision of healthcare services including check-up and preventive services, diagnostic services, disease management and patient care services including in corporate hospitals.

**RULE 4: APPLICABILITY FOR COST AUDIT**

The companies required to include cost records in their books of account in accordance with subrule (1), shall be required to get such cost records audited by a cost auditor.

Every company specified in item (A) of rule 3 shall get its cost records audited in accordance with these rules if the overall annual turnover of the company from all its products and services during the immediately preceding financial year is rupees fifty crore or more and the aggregate turnover of the individual product or products or service or services for which cost records are required to be maintained under rule 3 is rupees twenty five crore or more.

Every company specified in item (B) of rule 3 shall get its cost records audited in accordance with these rules if the overall annual turnover of the company from all its products and services during the immediately preceding financial year is rupees one hundred crore or more and the aggregate turnover of the individual product or products or service or services for which cost records are required to be maintained under rule 3 is rupees thirty five crore or more.

The requirement for cost audit under these rules shall not apply to a company which is covered in rule 3; and

(i) whose revenue from exports, in foreign exchange, exceeds seventy five per cent of its total revenue; or

(ii) which is operating from a special economic zone;

(iii) which is engaged in generation of electricity for captive consumption through Captive Generating Plant. For this purpose, the term “Captive Generating Plant” shall have the same meaning as assigned in rule 3 of the Electricity Rules, 2005”. Even for regulated sectors like Telecommunication, Electricity, Petroleum and Gas, Drugs and Pharma, Fertilizers and Sugar cost audit requirement has been made subject to a turnover based threshold of Rs. 50 crores for all product and services and Rs. 25 crores for individual product or services. For non-regulated sector the threshold is Rs. 100 crores and Rs. 35 crores, respectively.
RULE 4: DIAGRAMMATIC REPRESENTATION

Applicability of Cost Audit
( Rule 4)

Regulatory Sector
(A)

Overall
Annual
Turnover
during
immediately
preceding
financial
year
>=Rs 50
crore

If
Revenue
from
Export
(Foreign
Exchange)
>=75% of
total
revenue

If
operating
from
Special
Economic
Zone
(SEZ)

If
Revenue
from
Export
(Foreign
Exchange)
>= 75%
of
total
revenue

If
Operating
from
Special
Economic
Zone
(SEZ)

Aggregate
turnover of
the
individual
product or
products or
service or
services>=25
crore

Rule 4 will
not apply
only Rule
3 will
apply

Rule 4 will
not apply
only Rule
3 will
apply

Rule 4 will
not apply
only Rule
3 will
apply

Rule 4 will
not apply
only Rule
3 will
apply

Require Cost
Audit under
Rule 4

Non-Regulatory Sector
(B)

Overall
Annual
Turnover
during
immediately
preceding
financial
year
>=100
crore

If
Revenue
from
Export
(Foreign
Exchange)
>=75% of
total
revenue

If
operating
from
Special
Economic
Zone
(SEZ)

If
Revenue
from
Export
(Foreign
Exchange)
>= 75%
of
total
revenue

If
Operating
from
Special
Economic
Zone
(SEZ)

Aggregate
turnover of
the
individual
product or
products or
service or
services>=35
crore

Rule 4 will
not apply
only Rule
3 will
apply

Rule 4 will
not apply
only Rule
3 will
apply

Rule 4 will
not apply
only Rule
3 will
apply

Rule 4 will
not apply
only Rule
3 will
apply

Require Cost
Audit under
Rule 4

RULE 5: MAINTENANCE OF COST RECORDS

(1) Every company under these rules including all units and branches thereof, shall in respect of each of its financial year commencing on or after the 1st day of April, 2014, will maintain cost records in form CRA-1.

Provided that company is covered in serial number 12 and serial numbers 24 to 32 of item (B) of rule 3, the requirement under this rule shall apply in respect of each of its financial year commencing on or after 1st day of April, 2015.

(2) The cost records referred to in the sub-rule (1) shall be maintained on regular basis in such a manner as to facilitate calculation of per unit cost of production or cost of operations, cost of sales and margin for each of its products and activities for every financial year on monthly or quarterly or half yearly or annual basis.
(3) The cost records shall be maintained in such a manner so as to enable the company to exercise, as far as possible, control over the various operations and costs to achieve optimum economies in utilization of resources and these records shall also provide necessary data which is required to be furnished under these rules.

**RULE 6: COST AUDIT**

(1) The category of companies specified in rule 3 and the thresholds limits laid down in rule 4, shall within one hundred and eighty days of the commencement of every financial year, appoint a cost auditor.

Provided that before such an appointment is made, the written consent of the cost auditor, and a certificate from him, as provided in sub-rule (1A), shall be obtained

(1A) The cost auditor appointed under the sub-rule (1) shall submit a certificate that—

(a) the individual or the firm, as the case may be, is eligible for appointment and is not disqualified for appointment under the Act, the Cost and Works Accountants Act, 1959 (23 of 1959) and the rules or regulations made thereunder;

(b) the individual or the firm, as the case may be, satisfies the criteria provided in Section 141 of the Act, so far as may be applicable;

(c) the proposed appointment is within the limits laid down by or under the authority of the Act; and

(d) the list of proceedings against the Cost Auditor or audit firm or any partner of the audit firm pending with respect to professional matters of conduct, as disclosed in the certificate, is true and correct.”

(2) Every company referred to in the sub-rule (1) shall inform the cost auditor concerned of his appointment as such and file a notice of such appointment with the Central Government within a period of thirty days of the Board meeting in which such appointment is made, or within a period of one hundred and eighty days of the commencement of the financial year, whichever is earlier, through electronic mode, in form CRA-2, along with the fee as specified in Companies (Registration Offices and Fees) Rules, 2014.

(3) Every cost auditor appointed as such shall continue in such capacity till the expiry of one hundred and eighty days from the closure of the financial year or till he submits the cost audit report, for the financial year for which he has been appointed.

Provided that the cost auditor appointed under these rules may be removed from his office before the expiry of his term, through a Board resolution after giving a reasonable opportunity of being heard to the Cost Auditor and recording the reasons for such removal in writing;

Provided further that the Form CRA-2 to be filed with the Central Government for intimating appointment of another Cost Auditor shall enclose the relevant Board Resolution to the effect;

Provided also that nothing contained in this sub-rule shall prejudice the right of the cost auditor to resign from such office of the company.

(3A) Any casual vacancy in the office of a Cost Auditor, whether due to resignation, death or removal, shall be filled by the Board of Directors within thirty days of the occurrence of such vacancy and the company shall inform the Central Government in Form CRA-2 within thirty days of such appointment of cost auditor.

(3B) The cost statements, including other statements to be annexed to the cost audit report, shall be approved by the Board of Directors before they are signed on behalf of the Board by any of the director authorized by the Board, for submission to the Cost Auditor to report thereon .

(4) Every Cost Auditor, who conducts an audit of the cost records of a company, shall submit the cost audit report along with his or its reservations or qualifications or observations or suggestions, if any, in form CRA-3.

(5) Every Cost Auditor shall forward his duly signed report to the Board of Directors of the company within a period
of one hundred and eighty days from the closure of the financial year to which the report relates and the Board of Directors shall consider and examine such report, particularly any reservation or qualification contained therein.

(6) Every company covered under these rules shall, within a period of thirty days from the date of receipt of a copy of the cost audit report, furnish the Central Government with such report along with full information and explanation on every reservation or qualification contained therein, in Form CRA-4 in Extensible Business Reporting Language (XBRL) format in the manner as specified in the Companies (Filing of Documents and Forms in Extensible Business Reporting language) Rules, 2015 along with fees specified in the Companies (Registration Offices and Fees) Rules, 2014."

**RULE 6: DIAGRAMMATIC REPRESENTATION**

![Diagram](image)

**PURPOSE OF COST AUDIT**

The primary purpose of Cost Audit is to express an opinion on the cost accounts of the company whether these have been properly maintained and compiled according to the cost accounting system followed by the enterprise or not. However, the purposes of Cost Audit may be segregated into general and social objectives.
The general objectives can be described to include the following:

1. Verification of cost accounts with a view to ascertaining that these have been properly maintained and compiled according to the cost accounting system followed by the enterprise.

2. Ensuring that the prescribed procedures of cost accounting records rules are duly adhered to.

3. Detection of errors and fraud.

4. Verification of the cost of each “cost unit” and “cost centre” to ensure that these have been properly ascertained.

5. Determination of inventory valuation.

6. Facilitating the fixation of prices of goods and services.

7. Periodical reconciliation between cost accounts and financial accounts.

8. Ensuring optimum utilization of human, physical and financial resources of the enterprise.


10. Inculcation of cost consciousness.

11. Advising management, on the basis of interfirm comparison of cost records, as regards the areas where performance calls for improvement.

12. Promoting corporate governance through various operational disclosures.

Social Purposes of Cost Audit

The following deserve special mention:

1. Facilitate in fixation of reasonable prices of goods and services produced by the enterprise.

2. Improvement in productivity of human, physical and financial resources of the enterprise.

3. Channelize enterprise resources to most optimum, productive and profitable areas.

4. Availability of audited cost data as regards contracts containing escalation clauses.

5. Facilitate in settlement of bills in the case of cost-plus contracts entered into by the Government.

6. Pinpointing areas of inefficiency and mismanagement, if any for the benefit of shareholders, consumers, etc., such that necessary corrective action could be taken in time.

CRA-1: FORMS IN WHICH COST RECORDS SHALL BE MAINTAINED

The form CRA-1 prescribes the form in which cost records shall be maintained. The form categorizes the requirement of maintaining proper details as per 30 headings. The headings are as follows:

1. Material Cost

2. Employee Cost

3. Utilities

4. Direct Expenses

5. Repair and Maintenance

6. Fixed Assets and Depreciation

7. Overheads
(8) Administrative Overheads
(9) Transportation Cost
(10) Royalty and Technical Know-how
(11) Research and Development expenses
(12) Quality Control Expenses
(13) Pollution Control Expenses
(14) Service Department Expenses
(15) Packing Expenses
(16) Interest and Financing Charges
(17) Any other item of Cost
(18) Capacity Determination
(19) Work-in-progress and finished stock
(20) Captive Consumption
(21) By - Products and Joint Products
(22) Adjustment of Cost Variances
(23) Reconciliation of Cost and Financial Accounts
(24) Related Party Transactions
(25) Expenses or Incentives on Exports
(26) Production records
(27) Sales records
(28) Cost Statements
(29) Statistical Records
(30) Records of Physical Verification.

CRA-2: FORM OF INTIMATION OF APPOINTMENT OF COST AUDITOR BY THE COMPANY TO CENTRAL GOVERNMENT

(1) Corporate Identity Number (CIN) or Foreign Company Registration Number (FCRN) of the company
(2) General Information
(3) Product(s)/Service(s) to which Cost Audit relates
(4) Details of all the Cost Auditor(s) appointed
(5) Financial year to be covered under the Cost Audit
(6) Details of previous Cost Auditor which has not been reappointed
(7) Attachments
   – Copy of the Board resolution of the company
   – Optional attachment - if any
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**CRA-3: FORM OF COST AUDIT REPORT**

Clause (vii) have been added to auditor’s report as under:

Detailed unitwise and product/servicewise cost statements and schedules thereto in respect of the product/services under reference of the company duly audited and certified by me/us are/are not kept in the company.

**Annexure to Cost Audit Report**

Annexure has been reclassified into Four Parts as under:

**Part-A General Information,**

General Details of Cost Auditors,

Cost Accounting Policy,

Product/Service Details – of the company as a whole.

**Part-B for Manufacturing Sector**

Quantitative Information, Abridged Cost Statement, Details of Materials Consumed, Details of Utilities Consumed, Details of Industry Specific Operating Expenses.

**Part-C for Service Sector**

Quantitative Information,

Abridged Cost Statement,

Details of Materials Consumed,

Details of Utilities Consumed,

Details of Industry Specific Operating Expenses.

**Part-D Product and Service Profitability Statement, Profit RECONCILIATION, VALUE ADDITION AND DISTRIBUTION OF EARNINGS,**

Financial Position and Ratio Analysis,

Related Party Transactions,

Reconciliation of Indirect taxes.

**CRA-4: FORM FOR FILING COST AUDIT REPORT WITH THE CENTRAL GOVERNMENT**

1. Corporate Identity Number (CIN) or Foreign Company Registration Number (FCRN) of the company.

2. General Information

3. Details of industries/ sectors/product(s)/ service(s) (CETA heading level, wherever applicable as per Rules for Regulated and Non-regulated sector) for which cost audit report is being submitted.

4. Details of industries/ sectors/product(s)/ service(s) (CETA heading level, wherever applicable as per Rules for Regulated and Non-regulated sector) not cover in cost audit report.
5. Details of cost auditor(s) appointment.
6. Details of observation of cost audit report.
7. Attachments :
   • XBRL document in respect of the cost audit report and Company’s information and explanation on every qualification and reservation contained therein.
   • Optional attachment, if any.

LESSON ROUND UP

– The Companies Act, 2013 empowers the Central Government to make the rules so that companies engaged in specified industries, manufacturing, providing goods and rendering services are compelled to maintain their cost records by getting then audited, vide Section 148.
– As per Rule 2(e) the Companies (Cost Records and Audit) Rules, 2014, “Cost Records” means books of account relating to the utilization of materials, labour and other items of cost as applicable to the production of goods or provision of services under the provisions of Section 148 of the Act.
– It is mandatory to keep the cost records for the purpose of proper supervision and control.
– The class of companies, including foreign companies defined in clause (42) of Section 2 of the Act, engaged in the production of the goods or providing services, having an overall turnover from all its products and services of Rs. 35 crore or more during the immediately preceding financial year, shall include cost records for such products or services in their books of account.
– Every company specified in item (A) of rule 3 shall get its cost records audited in accordance with these rules if the overall annual turnover of the company from all its products and services during the immediately preceding financial year is rupees fifty crore or more and the aggregate turnover of the individual product or products or service or services for which cost records are required to be maintained under rule 3 is rupees twenty five crore or more.
– Every company specified in item (B) of rule 3 shall get its cost records audited in accordance with these rules if the overall annual turnover of the company from all its products and services during the immediately preceding financial year is rupees one hundred crore or more and the aggregate turnover of the individual product or products or service or services for which cost records are required to be maintained under rule 3 is rupees thirty five crore or more.
– The cost records referred to in sub-rule (1) shall be maintained on regular basis in such a manner as to facilitate calculation of per unit cost of production or cost of operations, cost of sales and margin for each of its products and activities for every financial year on monthly or quarterly or halfyearly or annual basis.
– The cost records shall be maintained in such a manner so as to enable the company to exercise, as far as possible, control over the various operations and costs to achieve optimum utilization of resources, and these records shall also provide necessary data which is required to be furnished under these rules.
– The category of companies specified in rule 3 and whose thresholds limits laid down in rule 4, shall within one hundred and eighty days of the commencement of every financial year, appoint a cost auditor.
– Form CRA-1 shall be maintained to keep cost records
– Form CRA-2 is the form of intimation of appointment of cost auditor by the company to Central Government
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- Form CRA-3 is the Cost Audit Report.
- Form CRA-4 is for filing Cost Audit Report with the Central Government

**SELF TEST QUESTIONS**

1. What do you mean by Cost Record? How should a company maintain the cost records?
2. Diagrammatically discuss the applicability of cost record.
3. State the provisions of the Companies Act, 2013 with respect to the Audit of Cost Accounts.
4. As per Rule 4 of Companies Act 2013 explain the applicability of Cost Audit.
5. How can a Cost Auditor be appointed in a company? Explain the form of intimation of appointment of cost auditor by the company to the Central Government.
6. What are the rights and responsibilities of a Cost Auditor?
7. Discuss the Cost Audit Report.
8. Whether maintenance of cost accounting records and cost audit thereof, subject to threshold limits prescribed, is applicable to products which are for 100% captive consumption?
A budget is a precise statement of the financial and qualitative implications of the course of action that management has decided to follow in the immediate next period of time.

A budget is a blue-print of the projected plan of action expressed in quantitative terms for a specified period of time. It translates the plan in a concrete form. In order to do so the management adheres to a system of control.

After studying this lesson the student will be able to understand:

- Meaning and importance of budget and budgetary control
- Preparing different types of budget
- Budget manual, budgeting key factor, budget period
- Zero Base Budgeting
- Performance Budget
- Budget Variance Analysis
BUDGET

A budget is a precise statement of the financial and quantitative policy to follow a course of action that management decide to follow in the immediate next period of time.

As per Chartered Institute of Management Accountants (CIMA), London, budget is, “A financial or quantitative statement, prepared and approved prior to a defined period of time of the policy to be pursued during that period for the purpose of attaining a given objective. It may include Income, Expenditure and Employment of Capital.” The budget is a blue-print of the projected plan of action expressed in quantitative terms for a specified period of time.

It translate the policy into a concrete from. In order to implement it successfully the company adheres to a system of control.

Budget is

(a) The quantitative expression of a proposed plan of action by management for a specified period, and
(b) An aid to coordinate what needs to be done in order to implement the plan.

A budget is a method for translating the goals and strategies of an organization into operational terms.

Essentials of Budget

(a) It is a statement expressed in monetary and/or physical units prepared for the implementation of policy formulated by the management.
(b) Objectives and degree of responsibility should be clearly stated and communicated to the management.
(c) A budget is prepared in advance and is based on the future plans of actions.
(d) It relates to a future period and is based on objectives to be obtained.
(e) A budget should be monitored periodically.
(f) Different types of budgets are prepared by an industrial concern for different purposes.

FORECAST AND BUDGET

A forecast is an assessment of probable future events. Budget a financial plan of a business enterprise to .. its operations. At the planning stage it is necessary to forecast a probable course of action for the business. Budget is a sort of commitment or a target which the management seeks to attain on the basis of the forecasts made. Forecasts are made regarding sales, production cost and financial requirements of the business. A forecast denotes some degree of flexibility while a budget denotes a definite target.

The following points of distinction can be noted between a forecast and budget:

<table>
<thead>
<tr>
<th>FORECAST</th>
<th>BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasting may be defined as analysis and interpretation of the future conditions in relation to operations of the enterprise. It involves looking ahead and projecting the future course of events.</td>
<td>A budget is a financial or quantitative statement, prepared and approved prior to a defined period of time of the policy to be pursued during that period for the purpose of attaining a given objective. It may include income, expenditure and employment of capital.</td>
</tr>
<tr>
<td>Forecast is a mere estimate of what is likely to happen. It is a statement of probable events which are likely to happen under anticipated conditions during a specified period of time.</td>
<td>Budget displays the that policy and programme to be followed in a future period under planned conditions.</td>
</tr>
</tbody>
</table>
Forecasts, being statements of future events, do not connote any sense of control.

A budget is a tool of control since it represents actions which can be shaped according to will so that it would suit the conditions which may unexpectedly come up.

Forecasting is a preliminary step for budgeting. It ends with the forecast of likely events. It begins where forecasting ends. Forecasts get converted into budgets.

Forecasts have wider scope, since it can be made in those spheres also where budgets can not interfere.

Budgets have limited scope. They it can be made of phenomena not capable of being expressed quantitatively.

**BUDGETING**

Budgeting is the complete process of designing, implementing and operating budgets. The main emphasis in budgeting process involved the provision of resources to support plans which are being implemented.

**BUDGETARY CONTROL**

CIMA, London, defines budgetary control as “the establishment of budgets relating to the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy or to provide a basis for its revision”.

It is the system of management control and accounting in which all operations are forecasted and planned so far as possible beforehand, and the actual results are compared with the forecasted and planned ones. Thus, budgetary control involves:

(a) Establishment of budgets;
(b) Continuous comparison of actual result with the previous made budget for the achievement of targets; thereby placing the responsibility for failure; and
(c) Revision of budget in the light of changed circumstances.

Budgetary control involves continuous comparison of actual results with the budgets and taking appropriate remedial action promptly. A budgetary control system, in this sense is also a control system. It is an excellent system for decent exert of the authority without losing control over the operations of the firm.

In short, budgetary control means laying down in momentary and quantitative terms what exactly has to be done and how it has to be done in the coming period; and to ensure that actual results do not diverge from the planned course of implementation more than necessary.

**OBJECTIVES OF BUDGETARY CONTROL**

The objectives of budgetary control are the following:

1. To use different levels of management in a cooperative endeavour to achieve of the objectives of the firm.
2. To facilitate centralized control with delegated authority and responsibility.
3. To achieve maximum profitability by planning income and expenditure through optimum use of the available resources.
4. To ensure adequate working capital in other resources for efficient operation of business.
5. To reduce losses and wastes to the minimum.
6. To bring out clearly where effort is needed to remedy the situation.
7. To see that the firm is not deflected from marching towards its long-term objectives without being overwhelmed by emergencies.
Various activities like production, sales and purchase of materials are coordinated with the help of budgetary control.

**Advantages of Budgetary Control**

Budgetary control offers many advantages. It uncovers unprofitable in operations, weaknesses in the organizational structure, and minimizes wasteful spending. It acts as a friend, philosopher and guide to the management. Its advantages can be summarized as follows:

1. It brings efficiency and economy in the working of the business enterprises.
2. It establishes divisional and departmental responsibility.
3. It coordinates the various divisions of a business, and therefore results in smoother operation of the entire organization.
4. It guards against undue optimism leading to over expansion.
5. It acts as a safety signal for the management. It serves as an automatic check on the judgement of the executives as losses are revealed in time which is a caution to the management to stop wastage.
6. Uniform policy without the disadvantage of a military kind of a business organization can be pursued by all divisions of the business by centralizing budgetary control.
7. It helps the management in obtaining the most profitable combination of different factors of production. This results in more economical use of capital.
8. It is the only means of predetermining when and to what extent financing will be necessary, avoiding the possibility of both over and under capitalization as well.
9. It provides a clear definition of the objective and policies of the concern and the tool for periodic examination the policies periodically.

**Limitations of Budgetary Control**

1. Budgetary control starts with the formulation of budgets which are mere estimates. Therefore, the adequacy or otherwise of budgetary control system, to a very large extent, depends upon the adequacy or accuracy with which estimates are made.
2. Budgets are meant to deal with business conditions which are constantly changing. Therefore, budgets estimates lose much of their usefulness under changing conditions because of their rigidity. It is necessary that budgetary control system should be kept adequately flexible.
3. The system of budgetary control is based on quantitative data and represents only an impersonal appraisal to the conduct of business activity unless it is supported by proper management of personal administration.
4. It has often been found that in practice the organization of budgetary control system become top heavy and costly, specially from the point of view of small terms.
5. Budgets and budgetary control have given rise to a very unhealthy tendency to be regarded as the solvent of all business problems. This has resulted in a very lukewarm human effort to deal with such problems and consequently the budgetary control system ends in failure.
6. It is human nature to resent any kind of control which constricts the authority of executives is also resentd.

**Steps in Budgetary Control**

Budgetary control requires the following steps to be taken:
(1) Organisation for Budgeting

The setting up of a definite plan of organization is the first step to be taken prior to beginning the real work of installing budgetary control. The responsibility of each executive must be clearly defined. There should be no uncertainty regarding the point where the jurisdiction of one executive ends and that of another begins.

(2) Budget Manual

The budget manual is a booklet specifying the objectives of an organization in relation to its spending strategy. The budget is made to decide how much an organization spend and in what manner. In the budget the organization sets its priorities too.

CIMA, London, defines it as, "a document which sets out the responsibilities of the persons engaged in, the routine of, and the forms and records required for, budgetary control.

Following are some of the important matters covered in a budget manual:

- A statement regarding the objectives of the organization and how they can be achieved through budgetary control;
- A statement about the functions and responsibilities of each executive the both regarding preparation and execution of budgets;
- Procedures to be followed for obtaining the necessary approval of budgets. The authority of granting approval should be stated in explicit terms. Whether, one two or more signatures are required on each document should be clearly stated;
- Time tables for all stages of budgeting;
- The manner of scrutiny and the personnel to carry it out;
- Reports, statements, forms and other record to be maintained;
- The accounts classification to be employed. It is necessary that the framework within which the costs, revenue and other financial accounts are classified must be identical both in the accounts and budget department;
- The reporting of the remedial action;
- The manner in which budgets, after acceptance and issuance, are to be revised or the matter amended these are included in budgets and on which action can be taken only with the approval of top management.

The main idea behind the budget manual is to inform line executives beforehand about procedures to be followed rather than issuing frequent instructions from the controller’s office regarding procedures and forms to be used. Such frequent instructions can be a source of friction between the line and staff management.

But there are many advantages attached to the use of the budget manual. It is a formal record defining the functions and responsibilities of each executive. The methods and procedures of budgetary control are standardized. There is synchronization of the efforts of all in an organization which result in maximization of profits.

Advantages of Budget Manual- The following are the advantages of Budget Manual:

1. An overall well coordinated plan, provided by budgetary control system shows what role each manager is expected to play in maximizing the profits.
2. Any problem arising in the working of a budgetary control system can be settled through the manual.
3. New employees get acquainted with the procedure involved in the operation of the system by referring to manual.
4. Methods and procedures become standardized.
5. Since coordination is maintained, there is no overlapping of instructions. There is in other words synchronization of all efforts which leads to the attainment of the objectives with minimum of friction.

(3) Responsibility for Budgeting

(a) Budget Controller

The Chief Executive is ultimately responsible for the budget programme but it will be better if the large part of the supervisory responsibility is delegated to an official designated as BUDGET CONTROLLER OR DIRECTOR.

The budget controller should have knowledge of the technical side of the business and should report to the president.

(b) Budget Committee

The budget committee is a group of representatives of various functions in an organization. As all functions are inter-related and as any change in one’s target will have its impact on that of the other, it is necessary to discuss the targets so that a mutually agreed programme is finally decided. This is what is called coordination in budget-making. It is a powerful force in knitting together various activities of the business and enforcing real control over operations.

The budget manual should specify the responsibilities and duties of the budget committee, which should include the following:

(1) Receive and review budget estimates from the respective divisions or departments and make recommendations.
(2) Recommend decisions or budget matters where there may be conflicts among departments or divisions.
(3) Recommend changes and approval of the revised budget.
(4) Receive, study and analyse periodic reports comparing the budget with actual performance.

Consider policies with respect to follow-up procedures.

(5) Consider and make recommendations for the revision of the budget when conditions warrant.
(6) Consider recommendations for changes in budget policies and procedures.
(7) Make recommendations for the budget manual.

(c) Fixation of Budget Period

Budget Period means the period for which a budget is prepared and employed.

The budget period will depend upon:

– the nature of the business, and
– the costing technique to be employed.

It refers to the period of time covered by a budget. The broad classification in this regard has already been stated as “long-term budget” and “short-term budget”.

The short-term budget itself could be bifurcated into yearly and quarterly budgets. Long-term budgets provide the perspective, since one would be able to have a view of what is likely to be achieved and what the chief problems are likely to be, such as competition from new products. Short-term budgets, say, for a year are quite exact and those for a quarter even more so. These are particularly suitable for control purposes. A short-term budget need not necessarily be for one year. It is generally long enough to cover one season or a business year.

For example, in case of mass production industries it is necessary to compare continuously the actual expenses with the budget; and therefore, the budget period should be a short one. Similar would be the case of a garment
manufacturer, as his business depends upon tastes and fashion which change very fast. But in case of a structural or heavy engineering works a long period budget period will be suitable.

(4) Budget Procedure
After the establishment of budget organization and fixation of the budget period the actual work of the budgetary control begins. The procedure followed in designing and operating a budgetary control system largely depends upon the nature of the business. The usual pattern is as follows:

(a) Determination of Key Factor
Key factor is that factor the extent of whose influence must first be assessed in order to ensure that functional budgets (relating to different functions of the business) are reasonably capable of fulfillment. It is also termed as limiting factor or governing factor.

It budget key factor or principal budget factor is described by the CIMA London terminology as: “a factor which will limit the activities of an undertaking and which is taken into account in preparing budgets”.

It is essential to consider this factor before preparing the budgets. In some concerns, the key factor may be sales, while in other cases it may be production, material, labour, machinery or capital. This most important factor which governs the whole process of preparation of budgets should be predetermined. The budget relating to this particular factor should be prepared first and other budgets should be based upon it. A coordinated plan should then be finally approved.

If a limiting factor cannot be got over by any means, the whole budget involving all functions will have to be built around that factor. For instance, if the production capacity is 50,000 units and it cannot be increased in the short run, all budgets, say, the sales budget and raw materials purchase budget, will have to be based on the production of 50,000 units. To achieve maximum profitability, a key factor must be overcome, if not, at least efforts should be made to minimize its adverse effect.

These factors are not of permanent nature and they can be overcome by the management in the long run if an effort is made in this direction by selecting optimum level of production, dealing in more profitable products, introducing new methods, changing material mix, working overtime or extra shifts, providing incentives to workers, hiring new machinery, etc.

<table>
<thead>
<tr>
<th>Item</th>
<th>Budget Factor (or Key Factor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials:</td>
<td>• Availability of supplies.</td>
</tr>
<tr>
<td></td>
<td>• Restrictions imposed by the Government like quotas.</td>
</tr>
<tr>
<td>Labour:</td>
<td>• Shortage in certain key processes.</td>
</tr>
<tr>
<td>Plant and machinery:</td>
<td>• Insufficient capacity for lack of space.</td>
</tr>
<tr>
<td></td>
<td>• Bottlenecks in certain key processes.</td>
</tr>
<tr>
<td>Sales:</td>
<td>• Market demand low.</td>
</tr>
<tr>
<td></td>
<td>• Insufficient advertising due to lack of funds.</td>
</tr>
<tr>
<td>Finance:</td>
<td>• Long-term finance.</td>
</tr>
<tr>
<td></td>
<td>• Short-term funds.</td>
</tr>
<tr>
<td>Management:</td>
<td>• Lack of managerial time for additional work.</td>
</tr>
</tbody>
</table>

It would be desirable to prepare first the budget relating to this particular factor, and then the other budget. An illustrative list of key factors in certain industries in given below:
Examples of key factors in specific Industries:

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>KEY FACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Car</td>
<td>Sales demand</td>
</tr>
<tr>
<td>Aluminium</td>
<td>Power</td>
</tr>
<tr>
<td>Petroleum Refinery</td>
<td>Supply of crude oil</td>
</tr>
<tr>
<td>Electro-optics</td>
<td>Skilled technicians</td>
</tr>
<tr>
<td>Hydro power generation</td>
<td>Monsoon</td>
</tr>
</tbody>
</table>

(b) Making of Forecasts

Forecast means an estimate about the probable events at a given period of time. It differs from a budget. Budget is an operating and financial plan of a business enterprise. It is a sort of commitment or a target which the management seeks to attain on the basis of the forecasts made.

(c) Consideration of Alternative Combination of Forecasts

Alternative combinations of forecast are considered with a view to obtain the most efficient overall plan so as to maximize profits. When the optimum combination of forecast is selected, it should be regarded as being finalized.

(d) Preparation of Budgets

After finalization the forecast, budgets are prepared. Production budget will be prepared on the basis of sales budget and also after taking into consideration the available productive capacities. Different cost of production budgets will be prepared on the basis of main production budget. Financial budget will be prepared on the basis of sales forecast and production budget. All these budgets will be combined and coordinated into one Master Budget. These budgets may be revised from time to time taking into account the current developments.

PREPARATION & MONITORING OF VARIOUS TYPES OF BUDGETS

Depending upon the various bases adopted, budgets may be classified into different categories. They may be classified on the basis of –

(i) the coverage or scope they encompass
   - Functional Budget
   - Master budget

(ii) the capacity or efficiency to which they are related
   - Fixed Budget
   - Flexible Budget

(iii) the conditions on which they are based and
   - Basic Budget
   - Current Budget

(iv) the periods which they cover
   - Long-Period Budget
   - Short-Period Budget
1. FUNCTIONAL BUDGETS

Budgets for a period are really classified according to the various activities in the organization. All activities are interrelated. The forecasts for individual activities are prepared and coordinated with other activities and then consolidated to show total effect of all activities as a whole. Approved targets for individual functions are known
as “functional budgets”. The consolidation of all functional budgets is known as the “Master Budget”. This is nothing but the targeted profit and loss statement and balance sheet of the organization.

Principal functional budgets are:

(a) Sales Budget

The sales budget forms the fundamental basis on which all other budgets are built up. The sales budget is a forecast of total sales, expressed in terms of money and quantity. It is essentially a forecast of sales to be achieved in a budget period. Sales forecasts are influenced by a variety of factors, external as well as internal. External factors include general business conditions, Government policy, etc. Internal factors consist of sales-prices, sales trend, new products, etc. The sales budget is based on sales forecasting which is the responsibility of the sales manager and market research staff. The sales budget is regarded as the keystone of budgeting.

Factors to be taken into consideration while preparing sales budget are :

(i) Past sales figures and trends
(ii) Plant capacity
(iii) General trade prospects
(iv) Potential market
(v) Availability of material and supply
(vi) Seasonal fluctuations
(vii) Finance aspect
(viii) Nature and degree of competition in the market

The sales manager after taking into consideration all these factors will prepare the sales budget in terms of quantity and money, distinguishing between products, periods and area of sales.

Illustration 1.

Ram Ltd. provides you the following figures for the year 2017.

<table>
<thead>
<tr>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (in units):</td>
<td>1st Quarter</td>
</tr>
<tr>
<td></td>
<td>2nd Quarter</td>
</tr>
<tr>
<td></td>
<td>3rd Quarter</td>
</tr>
<tr>
<td>Selling price per unit</td>
<td>Rs. 24</td>
</tr>
</tbody>
</table>

Targets for 2018:

<table>
<thead>
<tr>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales quantity increase (decrease)</td>
<td>(20%)</td>
</tr>
<tr>
<td>Selling price increase (decrease)</td>
<td>25%</td>
</tr>
</tbody>
</table>

Sales area X, Y and Z respectively produce 10%, 20%, 70% of Product ‘A’ sales and 70%, 20% and 10% of Product ‘B’ sales. Prepare a sales budget for 2018.
Solution:

Sales Budget (in Total) for the year 2018

<table>
<thead>
<tr>
<th>Product / Period</th>
<th>Product ‘A’</th>
<th>Product ‘A’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Rate Rs.</td>
</tr>
<tr>
<td>1st Quarter</td>
<td>1,000</td>
<td>30</td>
</tr>
<tr>
<td>2nd Quarter</td>
<td>2,360</td>
<td>30</td>
</tr>
<tr>
<td>3rd Quarter</td>
<td>2,160</td>
<td>30</td>
</tr>
<tr>
<td>4th Quarter</td>
<td>2,480</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,000</strong></td>
<td><strong>2,40,000</strong></td>
</tr>
</tbody>
</table>

Sales Budget (Area-wise)

<table>
<thead>
<tr>
<th>Product &amp; Area Period</th>
<th>Product ‘A’</th>
<th>Product ‘B’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X Rs.</td>
<td>Y Rs.</td>
</tr>
<tr>
<td>1st Quarter</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>2nd Quarter</td>
<td>7,080</td>
<td>14,160</td>
</tr>
<tr>
<td>3rd Quarter</td>
<td>6,480</td>
<td>12,960</td>
</tr>
<tr>
<td>4th Quarter</td>
<td>7,440</td>
<td>14,880</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>24,000</strong></td>
<td><strong>48,000</strong></td>
</tr>
</tbody>
</table>

(b) Production Budget

This budget provides an estimate of total volume of production productwise with the scheduling of operations by days, weeks and months, and a forecast of closing finished product inventory. The production budget may be expressed in quantitative or financial units or both.

The main steps involving in the preparation of a production budget are production planning; consideration of capacity; integration with sales forecasts, inventory policies, management’s overall policies. The operation of a production budget results in various advantages, main being: optimum utilization of productive resources of the enterprise, production of goods according to schedule enabling the concern to adhere to delivery dates, proper scheduling of factors of production.

For preparing production budget, following factors should be taken into consideration

(i) Inventory policies
(ii) Sales requirements
(iii) Production stability
(iv) Plant capacity
(v) Availability of material and labour
(vi) Time taken in production process

The sales and production budget are interdependent and must be prepared in cooperation with both sales and production department.
Illustration 2.

Sales (in units) as per Sales Budget:

<table>
<thead>
<tr>
<th>Product &amp; Period</th>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Quarter 2018</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>2nd Quarter 2018</td>
<td>2,360</td>
<td>1,000</td>
</tr>
<tr>
<td>3rd Quarter 2018</td>
<td>2,160</td>
<td>1,250</td>
</tr>
<tr>
<td>4th Quarter 2018</td>
<td>2,480</td>
<td>750</td>
</tr>
</tbody>
</table>

Stock position as on 1.1.2018:

<table>
<thead>
<tr>
<th>Product &amp; Period</th>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of 1st Quarter 2018 sales</td>
<td>20%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Stock position ending 1st, 2nd and 3rd Quarter:

<table>
<thead>
<tr>
<th>Product &amp; Period</th>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Next Quarter's sales</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Stock position on 31.12.2018:

<table>
<thead>
<tr>
<th>Product &amp; Period</th>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,200</td>
<td>1,000</td>
<td></td>
</tr>
</tbody>
</table>

Prepare Production Budget for the year 2018.

Solution:

Production Budget for the year 2018

<table>
<thead>
<tr>
<th>Product &amp; Period</th>
<th>Product 'A'</th>
<th>Product 'B'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulars</td>
<td>1st Q.</td>
<td>2nd Q.</td>
</tr>
<tr>
<td>A. Budgeted Sales</td>
<td>1,000</td>
<td>2,360</td>
</tr>
<tr>
<td>B. (+) Closing Stock</td>
<td>1,180</td>
<td>1,080</td>
</tr>
<tr>
<td>C. (-) Opening Stock</td>
<td>200</td>
<td>1,180</td>
</tr>
<tr>
<td>D. Units to be produced (A+ B-C)</td>
<td>1,980</td>
<td>2,260</td>
</tr>
</tbody>
</table>

Illustration 3.

The following are the estimates sales of a company for eight months ending 30.11.2017:

<table>
<thead>
<tr>
<th>Months</th>
<th>Estimated Sales (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr</td>
<td>2017</td>
</tr>
<tr>
<td>June</td>
<td>2017</td>
</tr>
<tr>
<td>May</td>
<td>2017</td>
</tr>
<tr>
<td>July</td>
<td>2017</td>
</tr>
<tr>
<td>Aug</td>
<td>2017</td>
</tr>
<tr>
<td>Sep</td>
<td>2017</td>
</tr>
<tr>
<td>Oct</td>
<td>2017</td>
</tr>
<tr>
<td>Nov</td>
<td>2017</td>
</tr>
</tbody>
</table>
As a matter of policy, the company maintains the closing balance of finished goods and raw materials as follows:

<table>
<thead>
<tr>
<th>Stock item</th>
<th>Closing balance of a month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Goods</td>
<td>50% of the estimated sales for the next months</td>
</tr>
<tr>
<td>Raw Materials</td>
<td>Estimated consumption for the next month</td>
</tr>
</tbody>
</table>

Every unit of production requires 2 kg. of raw materials costing Rs. 5 per kg. Prepare Production Budget (in units) and Raw Materials Purchase Budget (in units and cost) of the company for the half year ending 30 Sep, 2017.

**Solution:**

**PRODUCTION BUDGET (IN UNITS)**

For the half – year ending 30th the Sep. 2017

<table>
<thead>
<tr>
<th>Month</th>
<th>Sales</th>
<th>Closing Balances 50% of the Estimated Sales For the next month</th>
<th>Opening Balances</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5 = (2) + (3) - (4)</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>12,000</td>
<td>6,500</td>
<td>6,000</td>
<td>12,500</td>
</tr>
<tr>
<td>May</td>
<td>13,000</td>
<td>4,500</td>
<td>6,500</td>
<td>11,000</td>
</tr>
<tr>
<td>June</td>
<td>9,000</td>
<td>4,000</td>
<td>4,500</td>
<td>8,500</td>
</tr>
<tr>
<td>July</td>
<td>8,000</td>
<td>5,000</td>
<td>4,000</td>
<td>9,000</td>
</tr>
<tr>
<td>August</td>
<td>10,000</td>
<td>6,000</td>
<td>5,000</td>
<td>11,000</td>
</tr>
<tr>
<td>September</td>
<td>12,000</td>
<td>7,000</td>
<td>6,000</td>
<td>13,000</td>
</tr>
<tr>
<td></td>
<td>64,000</td>
<td></td>
<td></td>
<td>65,000</td>
</tr>
</tbody>
</table>

**PURCHASE BUDGETS (IN COST & UNITS)**

For the year ending 30th September, 2017

<table>
<thead>
<tr>
<th>Month</th>
<th>Production in units</th>
<th>Consumption (kg) @ 2 kg per unit</th>
<th>Closing Balance</th>
<th>Opening Balance</th>
<th>Purchase In kg</th>
<th>Rate Rs</th>
<th>Amount Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>12,500</td>
<td>25,000</td>
<td>22,000</td>
<td>25,000</td>
<td>22,000</td>
<td>5</td>
<td>1,10,000</td>
</tr>
<tr>
<td>May</td>
<td>11,000</td>
<td>22,000</td>
<td>17,000</td>
<td>22,000</td>
<td>17,000</td>
<td>5</td>
<td>85,000</td>
</tr>
<tr>
<td>June</td>
<td>8,500</td>
<td>17,000</td>
<td>18,000</td>
<td>17,000</td>
<td>18,000</td>
<td>5</td>
<td>90,000</td>
</tr>
<tr>
<td>July</td>
<td>9,000</td>
<td>18,000</td>
<td>22,000</td>
<td>18,000</td>
<td>22,000</td>
<td>5</td>
<td>1,10,000</td>
</tr>
<tr>
<td>August</td>
<td>11,000</td>
<td>22,000</td>
<td>26,000</td>
<td>22,000</td>
<td>26,000</td>
<td>5</td>
<td>1,30,000</td>
</tr>
<tr>
<td>September</td>
<td>13,000</td>
<td>26,000</td>
<td>26,000</td>
<td>26,000</td>
<td>26,000</td>
<td>5</td>
<td>1,30,000</td>
</tr>
<tr>
<td></td>
<td>65,000</td>
<td>1,30,000</td>
<td>26,000</td>
<td>26,000</td>
<td>6,55,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(C) Production Cost or Cost of Production Budget

After determining the volume of production, it is necessary to determine the cost of producing this output. It may be further classified into:
(1) Material Budget

Materials requirement budget, commonly known as materials budget, assist the purchase department in suitably planning the purchases, fixing the maximum and minimum levels of materials, components, etc. The timing and amount of funds which will be needed to make purchases are also known with the help of the materials budget.

The preparation of material budget includes the following:

(i) The preparation of estimates of raw material requirements
(ii) Scheduling of purchases in required quantities at with appropriate time
(iii) Controlling of raw material inventories

(2) Labour Budget

The labour budget tells about the estimates of labour requirements essential for carrying out the budgeted output. The budget gives details regarding direct labour cost and labour hours. The rates of pay, allowances, bonus, etc., of each category are then considered and labour cost to be set for each budget centre is calculated by multiplying the wage rate with the labour hours for the number of units of products budgeted.

(3) Plant Utilization Budget

It is prepared for estimation of plant capacity to meet the budgeted production during the budgeted period. It is a forecast of plant capacities available for fulfilling production requirements as specified in production budget. This budget is expressed in working hours or other convenient units.

(D) Overhead Budget

It may be classified as follows:

(1) Factory Overhead or Manufacturing Overhead Budget

The following steps are required to be taken to prepare the manufacturing overhead budget:

(i) Classification of expenditure into fixed, variable and semi-variable and collection thereof in accordance with a schedule of standing order numbers;
(ii) Departmentalization of expenditure;
(iii) Determining the level of activity for setting the overhead rates; and level of activity may be actual, budgeted level or of normal capacity; and
(iv) Establishing the variable overhead rates per unit of production or productive hour.

(2) Sales and Distribution Budget

This budget includes all expenses relating to sales, advertising, delivery of goods to customers, etc. It is better if such costs are analyzed according to products, types of customers, territories and the sales department in the organization itself. The responsibility of preparation of this budget rests with the executives of sales department. The preparation of the budget depends upon the analysis of the market situations by the management, companies is advertising policies, research programmes and the fixed and variable elements.

(3) Administration Overhead Budget

The budget covers expenses of all administrative offices and management salaries. A careful analysis of the needs of all the administrative department of the enterprise is very necessary. The minimum requirement for the efficient operation of each department can be estimated on the basis of the expenditure incurred in, and after a study of the plans and responsibilities of each administrative department for the budget period. The budget for the entire administrative division will be prepared by summing up the separate budgets of all administrative departments.
Research and development expenditure are to be incurred so that the products or methods of production do not become obsolete. The research and development budget is the forecast of all such expenses.

(E) Financial Budget

It is classified into the following:

(1) Cash Budget

A cash budget is a forecast of the financial position of the organization according to time period for a specific duration of time. Cash forecast can be made for a short period or even for a long duration. The cash budget plays an important part in coordinating and in service efficient working of the company. The budget is prepared by the chief accountant.

This budget is usually of two parts giving detailed estimates of (i) cash receipts and (ii) cash disbursements. Estimates of cash receipts are prepared on a monthly basis and depend upon estimated cash sales, collections from debtors and anticipated receipts from other sources such as sale of assets, borrowings, etc. Estimates of cash disbursements are based on estimated cash purchases, payments to creditors, employees remuneration, bonus, advances to suppliers, budgeted capital expenditure for expansion, etc.

The main objective of preparing cash budget are:

(i) The probable cash position, as a result of planned operation, is assessed; and thus the excess or shortage of cash becomes clear. This helps in arranging short-term borrowings in advance to meet the situations of shortage of cash or making investments when cash is in excess.

(ii) Cash can be coordinated in relation to total working capital, sales investment and debt.

(iii) A sound basis for credit for current control of cash position is established.

(iv) The effect of sudden and seasonal requirements, large stocks, delay in collection of receipts, etc., on the cash position of the organization is revealed and things become under to the management.

A cash budget can be prepared by any of the following methods:

(i) Receipts and Payments Method

(ii) Adjusted Profit and Loss Account Method

(iii) Balance Sheet Method.

(i) Receipts and Payments Method: In this method the cash receipts from various sources and cash payments to various agencies are estimated. Delay in cash receipts and lag in payments are taken into account for making estimates. Since this method is based on the concept of cash accounting, hence accruals and adjustments, obviously cannot find place in the preparation of cash budgets. The opening balance of cash of a period and the estimated cash receipts are added and from this, the total of estimated cash payments are deducted to find out the closing balance.

(ii) Adjusted Profit and Loss Account Method: In this method the opening balance is adjusted with the anticipated increases or decreases in current assets and liabilities, provision for depreciation, special receipts and the net profit for the year before taxation and appropriations. From the aggregate amount of these, the estimated taxation and dividends payable, expenditure on fixed assets and special payments, if any, are deducted. The resulting balance is the estimated cash in hand at the end of the budget period.

The vital point of difference between receipts and payments method and adjusted profit and loss method is that the former takes into account only cash transactions, while the latter considers non-cash items as it reverses all accruals. Further, adjusted profit and loss method gives only a broad idea of the cash position whereas receipts and payments method furnishes the maximum possible details.

(iii) Balance Sheet Method: Under this method of preparing cash budget a forecast balance sheet is
prepared as at the end of the budget period with all items of assets and liabilities except cash balance which is arrived at as a balancing figure. The magnitude of the two sides of the balance sheet excluding cash balance determines whether the bank account would show a debit or credit balance, i.e., cash balance in the bank or bank overdraft.

**Illustration 4.**

Prepare a cash budget for the months of May, June, and July 2017 on the basis of following information:

**Income & Expenditure Forecast**

<table>
<thead>
<tr>
<th>MONTHS</th>
<th>CREDIT SALES (Rs)</th>
<th>CREDIT PURCHASES (Rs)</th>
<th>WAGES (Rs)</th>
<th>MANUFACTURING EXPENSES (Rs)</th>
<th>OFFICE EXPENSES (Rs)</th>
<th>SELLING EXPENSES (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>60,000</td>
<td>36,000</td>
<td>9,000</td>
<td>4000</td>
<td>2000</td>
<td>4000</td>
</tr>
<tr>
<td>April</td>
<td>62,000</td>
<td>38,000</td>
<td>8,000</td>
<td>3000</td>
<td>1500</td>
<td>5000</td>
</tr>
<tr>
<td>May</td>
<td>64,000</td>
<td>33,000</td>
<td>10,000</td>
<td>4500</td>
<td>2500</td>
<td>4500</td>
</tr>
<tr>
<td>June</td>
<td>58,000</td>
<td>35,000</td>
<td>8500</td>
<td>3500</td>
<td>2000</td>
<td>3500</td>
</tr>
<tr>
<td>July</td>
<td>56,000</td>
<td>39,000</td>
<td>9500</td>
<td>4000</td>
<td>1000</td>
<td>4500</td>
</tr>
<tr>
<td>August</td>
<td>60,000</td>
<td>34,000</td>
<td>8000</td>
<td>3000</td>
<td>1500</td>
<td>4500</td>
</tr>
</tbody>
</table>

1. Cash balance on 1st May, 2017 is Rs 8,000.
2. Plant costing Rs 16,000 is due for delivery in July, payable 10% on delivery and the balance after 3 months.
3. Advance tax of Rs 8,000 each is payable in March and June.
4. Period of credit allowed by suppliers – 2 months and to customers – 1 month.
5. Lag in payment of manufacturing – ½ months.
6. Lag in payment of office and selling expenses – 1 month.

**Solution:**

**CASH BUDGET**

<table>
<thead>
<tr>
<th>PARTICULARS</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening balance</td>
<td>8000</td>
<td>13,750</td>
<td>12,250</td>
</tr>
<tr>
<td>CASH RECEIPTS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debtors</td>
<td>62,000</td>
<td>64,000</td>
<td>58,000</td>
</tr>
<tr>
<td></td>
<td>70,000</td>
<td>77,750</td>
<td>70,250</td>
</tr>
<tr>
<td>CASH PAYMENTS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creditors</td>
<td>36,000</td>
<td>38,000</td>
<td>33,000</td>
</tr>
<tr>
<td>Wages</td>
<td>10,000</td>
<td>8,500</td>
<td>9,500</td>
</tr>
<tr>
<td>Manufacturing expenses</td>
<td>3,750</td>
<td>4,000</td>
<td>3,750</td>
</tr>
<tr>
<td>Office expenses</td>
<td>1,500</td>
<td>2,500</td>
<td>2,000</td>
</tr>
<tr>
<td>Selling expenses</td>
<td>5,000</td>
<td>4,500</td>
<td>3,500</td>
</tr>
<tr>
<td>Plant</td>
<td>-</td>
<td>-</td>
<td>1,600</td>
</tr>
<tr>
<td>Advance tax</td>
<td>-</td>
<td>8,000</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>56,250</td>
<td>65,500</td>
<td>53,350</td>
</tr>
<tr>
<td>Closing balance</td>
<td>13,750</td>
<td>12,250</td>
<td>16,900</td>
</tr>
</tbody>
</table>
(2) Capital Expenditure Budget

The budget functions as a guidance as to the amount of capital that may be needed for the procurement of capital assets during the budget period. The budget is prepared after taking into account the available productive capacities, probable reallocation of existing assets and possible improvement in production techniques. If necessary, separate budgets may be prepared for each item of assets.

THE FINAL OR MASTER BUDGET

The Master budget is “a summary of the budget schedules in capsule form made for the purpose of presenting, in one report the highlights of budget forecast”. CIMA, London, defines it as “the summary budget, incorporating its component functional budgets, which is finally approved, adopted and employed.” Thus, it is a summary budget which incorporates all other budgets. It sets out the plan of operations for all departments in considerable detail for the budget period. The budget may take the form of Profit & Loss Account and Balance Sheet and the budgeted cash flow at the end of the budget period.

The master budget is prepared by the budget committee on the basis of coordinated functional budgets and becomes the target of the company during the budget period once it is finally approved. This budget acts as the company’s individualized key to successful financial planning and control. It provides the basis of computing the effect of any changes in any phase of operations, such as sales volume, product mix, prices, labour costs, material costs or change in facilities. It segregates income, costs and profits by areas of responsibility. Master budget presents all this information to the depth appropriate for the top management action. It also shows the gross and net profit and the important accounting ratios.

In a master budget, costs are classified and summarized by types of expenses as well as by departments. This information extends the range of usefulness of master budget. It is considered as the best mode of understanding the company’s micro-economic position by making things clear and more transparent for the forthcoming budget period.

FIXED BUDGETS

A budget prepared on the basis of standard or fixed level of activity is known as fixed budget. It does not change with a change in the level of activities. Therefore, it becomes an unrealistic measuring yardstick as the level of the activity actually attained does not conform to one assumes for the budgeting purposes. The management will not be in a position to assess the performance of different departmental heads on the basis of budget prepared by them because they can serve as measuring sticks only when the actual level of activity corresponds to the budgeted level of activity. On account of these defects of fixed budgeting, it has become a common practice in with of concerns where sales and production cannot be estimated accurately to give up the concept of fixed budgeting as it does not provide for automatic adjustments with the volume changes. Therefore, these budgets are useful only for fixed expenses.

FLEXIBLE BUDGETS

The Chartered Institute of Management Accountants, London defines flexible budget as a budget which by recognizing different cost behaviour patterns, is designed to change as volume of output changes. It is a budget prepared in a manner so as to give the budgeted cost for any level of activity. It recognising the difference between fixed, semi-fixed and variable cost is designed to change in relation to the activity attained. It is designed to furnish budgeted cost at any level of activity attained.

Flexible budgeting is desirable in the following cases:

(i) Where the level of activity during the year varies from period to period, either due to the seasonal nature of the industry, or to the variation in demand.
(ii) Where the business is a new one and it is difficult to foresee the demand.

(iii) Where the undertaking is suffering from the shortage of some factor/factors of production, such as materials, labour, plant capacity, etc.

The main characteristic of flexible budget is that it shows the expenditure appropriate to various levels of output. If the volume changes the expenditure appropriate to it can be established from the flexible budget for comparison with actual expenditure as a means of control. It provides a logical comparison of budget allowances with the actual cost. When flexible budget is prepared, actual cost of actual activity is compared with budgeted cost of actual activity, i.e., two things to a the same base. For preparation of flexible budget, items of cost have to be analysed individually to determine how different items of cost behave to change in volume. Therefore, in-depth cost analysis and cost identification is required for preparation of flexible budget.

Following are the striking features of flexible budgets:

(i) They are prepared for a range of activity instead of a single level.

(ii) They provide a very dynamic basis for comparison because they are automatically geared to changes in volume.

(iii) They provide a tailor-made budget for a particular volume.

(iv) These are based upon an adequate knowledge of cost behaviour pattern.

**Preparation of Flexible Budget**

A budget prepared in a manner so as the budgeted cost complies with for any level of activity is known as flexible budget. A flexible budget is the opposite of a static budget. It is prepared for a range of activity instead of a single level. Fixed costs are related mostly to the period of time, and are not concerned with the level of production or volume of sales. Variable costs vary directly and proportionately with the volume of activity. At zero level activity, the variable costs will not be in existence. The semi-variable costs occupy an “in-between” position between the fixed and variable costs. Apart of these costs is variable and the rest if fixed. They are fixed to a certain level of activity and then rise with increase in the level of the activity but not in the same proportion as the activity increases. As a matter of fact budget for each department can be prepared on the lines of flexible budget by classifying costs into ‘fixed’ and ‘variable’. In order to appropriately fix up the costs for different volumes, the degree of variability for each item cost at various levels of output could be evolved on the basis of past experience. This requires a close study of the individual items of expenditure, their nature and variability.

1. Decide the range of activity to develop a flexible budget.
2. Determine the cost behaviour - fixed, variable and semi-variable to each element of cost.
3. Select the activity level (generally in terms of output)
4. Prepare the budget at each activity level.

**Illustration 5.**

Appex Co. can produce 4,000 units of a certain product at 100% capacity. The following information is obtained from the books of account:

<table>
<thead>
<tr>
<th>Units produced</th>
<th>April</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,800</td>
<td>3,600</td>
</tr>
<tr>
<td>Power.</td>
<td>1,800</td>
<td>2,000</td>
</tr>
<tr>
<td>Repairs &amp; Maintenance</td>
<td>500</td>
<td>560</td>
</tr>
</tbody>
</table>

Rs.
Indirect labour 700 900
Consumable stores 1,400 1,800
Salaries 1,000 1,000
Inspection 200 240
Depreciation 1,400 1,400

Direct material cost per unit is Re. 1, and direct wages per hour is Rs.4. The rate of production per hour is 10 units.

Compute the cost of production at 100%, 80% and 60% capacity showing the variable, fixed and semi-fixed items under the flexible budget.

**Solution:**

**Statement Showing Cost of Production Under Flexible Budget**

<table>
<thead>
<tr>
<th>Items of Cost</th>
<th>60% Capacity</th>
<th>80% Capacity</th>
<th>100% Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,400 Units</td>
<td>3,200 Units</td>
<td>4,000 Units</td>
</tr>
<tr>
<td>Variable Cost</td>
<td>Rs</td>
<td>Rs</td>
<td>Rs</td>
</tr>
<tr>
<td>Direct Materials at Rs 1 per unit</td>
<td>2,400</td>
<td>3,200</td>
<td>4,000</td>
</tr>
<tr>
<td>Direct Wages at Rs 4 per Unit</td>
<td>960</td>
<td>1,280</td>
<td>1,600</td>
</tr>
<tr>
<td>Prime Cost</td>
<td>3,360</td>
<td>4,480</td>
<td>5,600</td>
</tr>
<tr>
<td>Factory Overheads Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Labour</td>
<td>600</td>
<td>800</td>
<td>1,000</td>
</tr>
<tr>
<td>Consumable Stores</td>
<td>1,200</td>
<td>1,600</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>1,800</td>
<td>2,400</td>
<td>3,000</td>
</tr>
<tr>
<td>Semi-Variable:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power-Fixed Rs 1,100 variable @ 25 paise per unit</td>
<td>1,700</td>
<td>1,900</td>
<td>2,100</td>
</tr>
<tr>
<td>Inspection-Fixed Rs 60 variable 25 paise per unit</td>
<td>180</td>
<td>220</td>
<td>260</td>
</tr>
<tr>
<td>Repair &amp; Maintenance Fixed Rs 290 Variable 7.5 paise per unit</td>
<td>470</td>
<td>530</td>
<td>590</td>
</tr>
<tr>
<td>Fixed</td>
<td>2,350</td>
<td>2,650</td>
<td>2,950</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1,400</td>
<td>1,400</td>
<td>1,400</td>
</tr>
<tr>
<td>Salaries</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Total Cost of Production</td>
<td>2,400</td>
<td>2,400</td>
<td>2,400</td>
</tr>
<tr>
<td></td>
<td>9,910</td>
<td>11,930</td>
<td>13,950</td>
</tr>
</tbody>
</table>

**Illustration 6**

X Ltd. has provided you the following information:

Production capacity 80% 60%
Costs (Rs. Lakhs)
Direct Materials  2.00  1.50  
Direct Labour  2.00  1.50  
Direct expenses  1.60  1.20  
Manufacturing Expenses  4.00  3.85  
Administrative Expenses  4.00  3.80  
Selling Expenses  4.00  3.75  
Sales  20.00  15.00  

Prepare a flexible budget at 50% and 90% capacity.

Solution:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Capacity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>A Sales</td>
<td>12.5</td>
</tr>
<tr>
<td>B Variable Cost of Sales:</td>
<td></td>
</tr>
<tr>
<td>(a) Direct Materials</td>
<td>1.25</td>
</tr>
<tr>
<td>(b) Direct Labor</td>
<td>1.25</td>
</tr>
<tr>
<td>(c) Direct Expenses</td>
<td>1.00</td>
</tr>
<tr>
<td>(d) Mfg. Expenses</td>
<td>.375</td>
</tr>
<tr>
<td>(e) Adm. Expenses</td>
<td>.50</td>
</tr>
<tr>
<td>(f) Selling Expenses</td>
<td>.625</td>
</tr>
<tr>
<td>C Contribution (A - B)</td>
<td>7.5</td>
</tr>
<tr>
<td>D Fixed Costs:</td>
<td></td>
</tr>
<tr>
<td>(a) Mfg. Expenses</td>
<td>3.4</td>
</tr>
<tr>
<td>(b) Adm Expenses</td>
<td>3.2</td>
</tr>
<tr>
<td>(c) Selling Expenses</td>
<td>3.0</td>
</tr>
<tr>
<td>E Net Profit before tax (C - D)</td>
<td>(2.1)</td>
</tr>
</tbody>
</table>

Working Note:

Statement showing the Calculation of Fixed and Variable Expenses

<table>
<thead>
<tr>
<th>A Particulars</th>
<th>B Variable Costs at 20%</th>
<th>C = B × 80/20 Variable Costs at 80%</th>
<th>D Total cost at 80%</th>
<th>E=D-C Fixed Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material</td>
<td>.50</td>
<td>2.00</td>
<td>2.00</td>
<td>Nil</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>.50</td>
<td>2.00</td>
<td>2.00</td>
<td>Nil</td>
</tr>
<tr>
<td>Direct Expenses</td>
<td>.40</td>
<td>1.60</td>
<td>1.60</td>
<td>Nil</td>
</tr>
<tr>
<td>Mfg. Expenses</td>
<td>.15</td>
<td>0.60</td>
<td>4.00</td>
<td>3.4</td>
</tr>
<tr>
<td>Adm. Expenses</td>
<td>.20</td>
<td>0.80</td>
<td>4.00</td>
<td>3.2</td>
</tr>
<tr>
<td>Selling Expenses</td>
<td>.25</td>
<td>1.00</td>
<td>4.00</td>
<td>3.0</td>
</tr>
<tr>
<td>Sales</td>
<td>2.00</td>
<td>8.00</td>
<td>17.60</td>
<td>9.6</td>
</tr>
</tbody>
</table>
Illustration 7

For the production of 10,000 electric automatic irons the following are the budgeted expenses:

\[ \text{(Per unit) Rs} \]

<table>
<thead>
<tr>
<th>Item</th>
<th>Per Unit Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material</td>
<td>60</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>30</td>
</tr>
<tr>
<td>Variable overhead</td>
<td>25</td>
</tr>
<tr>
<td>Fixed overhead (Rs.1,50,000)</td>
<td>15</td>
</tr>
<tr>
<td>Variable expenses (direct)</td>
<td>5</td>
</tr>
<tr>
<td>Selling expenses (10% fixed)</td>
<td>15</td>
</tr>
<tr>
<td>Administration expenses (Rs 50,000 rigid for all levels of production)</td>
<td>5</td>
</tr>
<tr>
<td>Distribution expenses (20%) fixed</td>
<td>5</td>
</tr>
<tr>
<td>Total cost of sale per unit</td>
<td>160</td>
</tr>
</tbody>
</table>

Prepare a budget for the production of 6,000 and 7,000 and 8,000 irons showing distinctly the marginal cost and the total cost.

Solution:

Flexible Budget of Electrical Automatic Irons

<table>
<thead>
<tr>
<th>Particulars</th>
<th>6,000 Units</th>
<th>7,000 Units</th>
<th>8,000 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Rs</td>
<td>Per Unit Rs</td>
<td>Total Rs</td>
</tr>
<tr>
<td>Marginal Cost:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Materials</td>
<td>3,60,000</td>
<td>60,000</td>
<td>4,20,000</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>1,80,000</td>
<td>30.00</td>
<td>2,10,000</td>
</tr>
<tr>
<td>Direct Variable expo</td>
<td>30,000</td>
<td>5.00</td>
<td>35,000</td>
</tr>
<tr>
<td>Variable Overheads:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>1,50,000</td>
<td>25.00</td>
<td>1,75,000</td>
</tr>
<tr>
<td>Selling</td>
<td>81,000</td>
<td>13.50</td>
<td>94,500</td>
</tr>
<tr>
<td>Distribution</td>
<td>24,000</td>
<td>4.00</td>
<td>28,000</td>
</tr>
<tr>
<td>Fixed Cost:</td>
<td>8,25,000</td>
<td>137.50</td>
<td>9,62,500</td>
</tr>
<tr>
<td>Fixed Production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>1,50,000</td>
<td>25.00</td>
<td>1,50,000</td>
</tr>
<tr>
<td>Overheads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling Overheads</td>
<td>50,000</td>
<td>8.33</td>
<td>50,000</td>
</tr>
<tr>
<td>Distribution Overheads</td>
<td>15,000</td>
<td>2.50</td>
<td>15,000</td>
</tr>
<tr>
<td>Total Cost</td>
<td>2,25,000</td>
<td>37.50</td>
<td>2,25,000</td>
</tr>
<tr>
<td>(Marginal plus Fixed Cost)</td>
<td>10,50,000</td>
<td>175.00</td>
<td>11,87,500</td>
</tr>
</tbody>
</table>
Working notes:

<table>
<thead>
<tr>
<th></th>
<th>Selling Expenses Rs</th>
<th>Distribution Expenses Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for 10,000 units</td>
<td>1,50,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Variable: 90% &amp; 80%, respectively</td>
<td>1,35,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Variable Expenses per unit</td>
<td>13.50</td>
<td>4.00</td>
</tr>
<tr>
<td>Fixed Expenses 10% and 20% of total, respectively</td>
<td>15,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Illustration 8

The budget manager of Jaypee Electricals Ltd. is preparing a flexible budget for the accounting year commencing from 1st April, 2017. The company produces one product – peekay. Direct material costs Rs. 7 per unit. Direct labour averages Rs. 2.50 per hour and requires 1.60 hours to produce one unit of peekay. Salesmen are paid a commission of Re. 1 per unit sold. Fixed-selling and administration expenses amount to Rs. 85,000 per year. Manufacturing overheads under specified condition of volume have been estimated as follows:

Normal capacity of production of the company is 1,25,000 units. Prepare a budget of total cost at 1,40,000 units of output.

<table>
<thead>
<tr>
<th>Volume of production (Units)</th>
<th>1,20,000</th>
<th>1,50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect material</td>
<td>2,64,000</td>
<td>3,30,000</td>
</tr>
<tr>
<td>Indirect labour</td>
<td>1,50,000</td>
<td>1,87,500</td>
</tr>
<tr>
<td>Inspection</td>
<td>90,000</td>
<td>1,12500</td>
</tr>
<tr>
<td>Maintenance</td>
<td>84,000</td>
<td>1,02,000</td>
</tr>
<tr>
<td>Supervision</td>
<td>1,98,000</td>
<td>2,34,000</td>
</tr>
<tr>
<td>Depreciation - plant and equipment</td>
<td>90,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Engineering services</td>
<td>94,000</td>
<td>94,000</td>
</tr>
<tr>
<td>Total manufacturing overheads</td>
<td>9,70,000</td>
<td>11,50,000</td>
</tr>
</tbody>
</table>

Solution:

Jaypee Electricals Ltd.

BUDGET FOR THE YEAR ENDING

<table>
<thead>
<tr>
<th>Normal Capacity 1,25,000 units</th>
<th>Rate per unit</th>
<th>Output 1,40,000 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Costs</td>
<td>Rs</td>
<td>Rs</td>
</tr>
<tr>
<td>Direct Materials</td>
<td>700</td>
<td>9,80,000</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>400</td>
<td>5,60,000</td>
</tr>
<tr>
<td>Salesmen’s Commission</td>
<td>1.00</td>
<td>1,40,000</td>
</tr>
<tr>
<td>Indirect Materials</td>
<td>2.00</td>
<td>3,08,000</td>
</tr>
<tr>
<td>Inspection</td>
<td>1.25</td>
<td>1,75,000</td>
</tr>
<tr>
<td>Total Variable Costs (1)</td>
<td>0.75</td>
<td>1,05,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22,68,000</td>
</tr>
</tbody>
</table>
Semi-Variable Costs

Maintenance (WN : 1)
- Fixed: 12,000
- Variable: 0.60
  - Total Variable Cost for 1,20,000 units = 1,20,000 × 0.60 = Rs 72,000
  - Total Fixed Costs = 84,000 - 72,000 = Rs 12,000

Supervision (WN : 2)
- Fixed: 54,000
- Variable: 1.20
  - Total Variable Cost for 1,20,000 units = 1,20,000 × 1.20 = Rs 1,44,000
  - Total Fixed Costs = 1,98,000 - 1,44,000 = Rs 54,000

Total Semi-Variable Costs (2) = 3,18,000

Fixed Costs
- Selling & Administration Expenses: 85,000
- Depreciation: Plant and Equipment: 90,000
- Engineering Service: 94,000

Total Fixed Costs (3) = 2,69,000

Total Costs (1) + (2) + (3) = 28,55,000

Working Notes:
1. Maintenance Cost Variable per unit = Change in Cost / Change in Output
   = 18,000/30,000 = Re 0.60 per unit
   - Total Variable Cost for 1,20,000 units = 1,20,000 × 0.60 = Rs 72,000
   - Total Fixed Costs = 84,000 - 72,000 = Rs 12,000
2. Supervision Cost
   - Variable Cost per unit = Change in Cost / Change in Output
     = 36,000 /30,000 = Rs 1.20 per unit
   - Total Variable Cost for 1,20,000 units = 1,20,000 × 1.20 = Rs 1,44,000
     = 1,98,000 - 1,44,000 = Rs 54,000

BASIC BUDGETS

Basic budget has been defined as a budget which is prepared for use unaltered for a long period of time.
This does not take into consideration current conditions and can be attainable under standard conditions.

CURRENT BUDGET

A current budget can be defined as a budget which is related to the current conditions and is prepared for use for a short period of time. This budget is more useful than basic budget, as the target it lays down will be corrected to current conditions.

LONG-TERM BUDGETS

A long-term budget can be defined as a budget which is prepared for periods longer than a year. These budgets help in business forecasting and forward planning. Capital expenditure budgets and research developments budgets are good examples of long-term budgets.
**SHORT-TERM BUDGET**

This budget is defined as a budget which is prepared for a period less than a year and is very useful to lower levels of management for control purposes. In an ideal situation a short-term budget should perfectly fit into a long-term budget.

**Control Ratios**

Ratios are used to determine the production efficiency and the costs. It tells the ratio of actual level of activity attained, degree of efficiency attained and the actual capacity utilized during a budgeted period. Three important ratios are commonly used by the management to find out whether the deviations of actuals from budgeted results are favourable or otherwise.

These ratios are expressed in terms of percentages. They are:

a) **Activity Ratios**: It is a measure of the level of activity attained over a period. This ratio expresses relationship between standard hours for actual production and budgeted hours. The formula is:

\[
\text{Activity Ratio} = \frac{\text{Standard hours for actual output}}{\text{Budgeted Standard hours}} \times 100
\]

b) **Capacity Ratio**: This ratio indicates whether and to what extent budgeted hours of activity are actually utilized. The object is to show whether or not the available hours are being fully utilized.

The formula is:

\[
\text{Capacity Ratio} = \frac{\text{Actual Hours Worked}}{\text{Budgeted Hours}} \times 100
\]

c) **Efficiency Ratio or Productivity Ratio**: This ratio is an important measure of the level of efficiency attained by the productive processes. It indicates the efficiency attained in producing a stated output. The formula is Standard Hrs for Actual Production

\[
\text{Efficiency Ratio} = \frac{\text{Standard hours for actual output}}{\text{Actual Hours Worked}} \times 100
\]

d) **Calendar Ratio**: This ratio indicates if the actual working days have been equal to more than or less than the budgeted number of days in the period under study. The formula is:

\[
\text{Calendar Ratio} = \frac{\text{Actual working days in the period}}{\text{Working days on the basis of budget during the period}} \times 100
\]

**Illustration 9**

Activity ratio of the company is 80% and its capacity ratio is 120%. Find out its efficiency ratio.

**Solution:**

Activity ratio = capacity ratio x Efficiency ratio

\[80 = 120 \times \text{efficiency ratio}\]

Efficiency ratio = \(\frac{80}{120}\)

= 66.67%

**ZERO-BASE BUDGETING**

Zero-base budgeting is a new technique designed to revitalize budgeting. A company should not only make
decisions about the proposed new programmes, but it should also from time to time review the appropriateness of the existing programmes. Zero base budgeting is one of the such techniques of such an appraisal.

As the term suggests, it examines a programme or function or responsibility from scratch. The manager proposing this activity has, therefore, to prove that the activity is essential and the various amounts asked for are really reasonable taking into account the volume of activity.

CIMA defines zero-base budgeting as “a method of budgeting whereby all activities are re-evaluated each time a budget is set. Discrete levels of each activity are valued and a combination chosen to match funds available.”

Zero base budgeting is a revolutionary concept of planning future activities, and it is sharply contradictory conventional budgeting. Zero base budgeting, may be better termed as “De nova budgeting” or budgeting from the beginning without any reference to any base past budget and actual happening. It is a technique which complements and links the existing planning, budgeting and review processes. It identifies alternative and efficient methods of utilising limited resources in effective attainment of selected benefits. It is a flexible management approach which provides a credible rationale for reallocating resources by focusing on systematic review and justification of the funding and performance levels of current programmes of activities.

Zero-base budgeting is based on the premise that every rupee of expenditure requires justification. The traditional budgeting approach includes expenditures of previous year which are automatically incorporated in new budget proposals and only increments are subjected to debate. Zero-base budgeting assumes that a responsibility-centre manager has had no previous expenditure. Important features of zero-base budgeting are:

(i) Concentration of efforts is not simply on “how much” a unit will spend but “why” it needs to spend.
(ii) Choices are made on the basis of what each unit can offer for a specific cost.
(iii) Individual unit’s objects are linked to corporate targets.
(iv) Quick budget adjustments can be made if during the operating year costs are required to maintain expenditure level.
(v) Alternative ways are considered.
(vi) Participation of all levels in decision-making.

**PERFORMANCE BUDGETING**

Performance budgeting involves evaluation of the performance of an organization in the context of both specific as well as overall objectives of the organization. This requires complete clarity about both the short-term as well as long-term organizational objectives. The responsibility of the various levels of management should be predetermined in terms of results expected from them and the authority vested in them. In other words performance budgeting requires fixing of the responsibility of each executive in organization and the continuous appraisal of his performance. It is, therefore, considered to be synonymous with responsibility accounting.

The purpose of performance budgeting is to focus attention upon the work to be done, services to be rendered rather than things to be spent for or acquired. In performance budgeting, emphasis is shifted from control of inputs to efficient and economic management of functions and objectives. It takes a system view of activities by trying to associate the inputs of the expenditure with the output of accomplishment in terms of services, benefits, etc. In performance budgeting, the objectives of the budget makers and setting the task and subtask for accomplishment of the defined objectives are to be clearly decided well in advance before budgetary allocations of inputs are made. Each homogenous function is broken down into a number of subordinate functions.

Performance budgeting, is, therefore, looked upon as a budget based on functions, activities and projects and is linked to the budgetary system based on objective classification of expenditure.
The basic features of performance budgeting are:

1. Budget is prepared for each managerial level. The manager concerned is made responsible and held accountable for his performance at his level over the specified period of time.

2. The jurisdiction of the authority and responsibility for different costs controllable by the executive concerned is fixed up. In other words, each individual is held responsible for only such costs which are controllable by him.

3. The concerned executive is vested with the requisite authority required for the responsibility entrusted to him.

The main purposes of performance budgeting are:

1. To review at every stage, and at every level of the organization, so as to measure progress towards the short-term and long-term objectives.

2. To interrelate physical and financial aspects of every programme, project or activity.

3. To facilitate more effective performance audit.

4. To assess the effects of the decision-making of supervisor to the middle and top managers.

5. To bring annual plans and budgets in line with the short- and long-term plan objectives.

6. To present a comprehensive operational document showing the complete planning fabric of the programmes and prospects with their objectives interwoven with the financial and physical aspects.

The preparation of performance budget requires the following steps for achieving the desired goals efficiently:

(i) An organization chart should be prepared giving the responsibility and authority to each level of management.

(ii) The performance budget should not be imposed from above. The concerned executive should be taken into confidence while preparing the budgets relating to his area of operation.

(iii) The concerned executive should be continuously fed with the periodical reports, statements, etc., showing the budgeted and actual performance so that remedial measures may be taken during the relevant period.

(iv) The statements and reports mentioned above should be prepared regularly, accurately and timely.

However, performance budgeting has certain limitations such as difficulty in classifying programmes and activities, problems of evaluation of various schemes, and relegation to the background of important programmes. Moreover, the technique enables only quantitative evaluation scheme and sometimes the needed results cannot be measured.

### BUDGET VARIANCE

A budget variance is the difference between the budgeted or baseline amount of expense or revenue, and the actual amount. The budget variance is favourable when the actual revenue is higher than the budget or when the actual expense is less than the budgeted expense.

A budget variance is frequently caused by bad assumptions or improper budgeting, so that the baseline against which actual results are measured are not reasonable. Those budget variances that are controllable are usually expenses, which are committed expenses, though a large portion of expenses are those expenses which cannot be altered in the short run, whereas controllable expenses are discretionary expenses, which can be eliminated without an immediate adverse impact on profits.

Budget versus actual analysis can provide insight as to what really happened in your business against what
was expected. A budget is never going to be exact. Budgets typically use rounded and estimated figures which are simply forecast. Analysis of budget help us to provide insight for positive or negative variance. Negative variances can be caused by an efficiency problem, utilization problem, or due to unexpected or unavoidable occurrence whereas positive variance can provide insight as to why you did so well and what processes are working for your business.

Managerial uses of variance analysis are:

1. Costs can be controlled as it brings into focus controllable and uncontrollable costs along with their causes.
2. The causes of variance are highlighted making it possible to take remedial measures in time.

**Importance of Budget Variance Analysis**

1. It aids efficient budgeting activity as management wishes to have lower deviations from the planned budget.
2. It acts as a control mechanism and helps management look into possible ways of how such deviation can be avoided.
3. It facilitates assigning responsibility and implements control mechanism on departments where it is required.
4. It helps in identifying needed changes in the overall strategies, i.e., to reevaluate the company’s product line or target-customer base.
5. Without a variance analysis, a budget ceases to be a working document.

**Limitations of Budget Variance Analysis**

1. If the budgeting is not made taking into consideration the detailed analysis of each factor, its exercise would be loosely done, which is bound to deviate from actual numbers.
2. It is an activity based on financial results which are released much later after quarterly closing, there may be a time gap which may affect the remedial action taking activity to a certain extent.

**Lesson Sum Up**

- A budget is a precise statement of the financial and quantitative implications of the course of action that management has decided to follow in the immediate next period of time.
- Forecasting may be defined as analysis and interpretation of the future conditions in relation to operations of the enterprise. It involves looking ahead and projecting the future course of events.
- Budgeting is the complete process of designing, implementing and operating budgets. The main emphasis in this is short-term budgeting process involving the provision of resources to support plans which are being implemented.
- CIMA, London, defines budgetary control as “the establishment of budgets relating to the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy or to provide a basis for its revision”.
- The budget manual is a written document or booklet which specifies the objectives of the budgeting organization and procedures.
- Budget Period means the period for which a budget is prepared and employed.
- The budget key factor or principal budget factor is described by the CIMA London terminology as: “a factor which will limit the activities of an undertaking and which is taken into account in preparing budgets”.

- The Master budget is “a summary of the budget schedules in capsule form made for the purpose of presenting, in one report, the highlights of budget forecast”.

- The Chartered Institute of Management Accountants, London defines flexible budget as a budget which by recognising different cost behaviour patterns, is designed to change as volume of output changes. It is a budget prepared in a manner so as to give the budgeted cost for any level of activity. It is a budget which by recognising the difference between fixed, semi-fixed and variable cost is designed to change in relation to the activity attained.

- Zero base budgeting as “a method of budgeting whereby all activities are re-evaluated each time a budget is set. Discrete levels of each activity are valued and a combination chosen to match funds available.”

- Performance budgeting, is looked upon as a budget based on functions, activities and projects and is linked to the budgetary system based on objective classification of expenditure.

- Performance budgeting involves evaluation of the performance of an organization in the context of both specific as well as overall objectives of the organization.

- A budget variance is the difference between the budgeted or baseline amount of expense or revenue, and the actual amount. The budget variance is favourable when the actual revenue is higher than the budget or when the actual expense is less than the budgeted expense.

- Negative variances can be caused by an efficiency problem, utilization problem, or due to unexpected or unavoidable occurrence whereas positive variance can provide insight why you did so well and what processes are working for your business.

### SELF TEST QUESTIONS

Q1. A budget has been defined as, “A financial, quantitative interpretation of a policy to be pursued for that period to attain a given objective.” Bring out, from the above definition, the essentials of a budget.

Q2. Discuss the steps necessary for the success of budgetary control system in an organization.

Q3. Differentiate between zero-based budgeting and traditional budgeting.

Q4. Explain briefly the concept of flexible budget.

Q5. What do you understand by performance budgeting. What steps are required to be taken for preparing performance budget.

Q6. Write a short note on

   (a) Zero base budgeting
   (b) Principal budget factor
   (c) Budget manual
   (d) Fixed budget
   (e) Control ratios

Q7. A firm at present operates at 60 % of its capacity. At this level and at the level of 50 % (utilization of capacity, the figures relating to its operations could be summarized as stated below:
### Lesson 15  ●  Budget, Budgeting and Budgetary Control  ●  433

<table>
<thead>
<tr>
<th></th>
<th>50%</th>
<th>60%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs.</td>
<td>Rs.</td>
</tr>
<tr>
<td>Materials</td>
<td>10,00,000</td>
<td>12,00,000</td>
</tr>
<tr>
<td>Labour</td>
<td>8,00,000</td>
<td>9,00,000</td>
</tr>
<tr>
<td>Manufacturing overheads</td>
<td>6,00,000</td>
<td>6,60,000</td>
</tr>
<tr>
<td>Administrative overheads</td>
<td>3,50,000</td>
<td>3,50,000</td>
</tr>
<tr>
<td>Selling and distribution overheads</td>
<td>4,50,000</td>
<td>5,00,000</td>
</tr>
<tr>
<td>Research and development</td>
<td>1,50,000</td>
<td>2,00,000</td>
</tr>
<tr>
<td>Total</td>
<td>33,50,000</td>
<td>38,10,000</td>
</tr>
<tr>
<td>Profit</td>
<td>1,50,000</td>
<td>3,90,000</td>
</tr>
<tr>
<td>Sales</td>
<td>35,00,000</td>
<td>42,00,000</td>
</tr>
</tbody>
</table>

Draw up the budget at 80% utilization of capacity assuming that-

1. Sales at this level can be maintained flat 5% reduction in the selling price to reduce the cost of material.
2. Economy in purchase of material will equal to 2-1/2% of the current amounts.
3. The research and development expenditure will be pegged a Rs2,50,000 per annum; and
4. Administrative overheads will require 10% increase

#### Q8.
With the following data for a 600% activity, prepare a budget at 80% and 100% activity:

- Production at 60% capacity - 600 units
- Materials Rs. 100 per unit
- Labour Rs. 40 per unit
- Expenses Rs. 10 per unit
- Factory expenses Rs. 40,000 (40% fixed)
- Administration expenses Rs. 30,000 (60% fixed)

#### Q9.
The cost of a product at capacity level of 5,000 ‘A’ below For a variation in capacity above or below this level, individual expenses vary as indicated under ‘B’ Below

<table>
<thead>
<tr>
<th>Particulars</th>
<th>‘A’ (Rs)</th>
<th>‘B’ (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material costs</td>
<td>2,50,000</td>
<td>100% varying</td>
</tr>
<tr>
<td>Labour costs</td>
<td>1,50,000</td>
<td>100% varying</td>
</tr>
<tr>
<td>Power</td>
<td>12,500</td>
<td>80% varying</td>
</tr>
<tr>
<td>Repair &amp; maintenance</td>
<td>20,000</td>
<td>75% varying</td>
</tr>
<tr>
<td>Stores</td>
<td>10,000</td>
<td>100% varying</td>
</tr>
<tr>
<td>Inspection</td>
<td>5,000</td>
<td>20% varying</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1,00,000</td>
<td>100% varying</td>
</tr>
</tbody>
</table>
Administrative overheads 50,000 25 % varying
Selling overheads 30,000 50% varying

Find out the unit cost of product under each individual expense at budgeted production levels of 4,000 and 6,000 units.

Q10. The Sales Director of a manufacturing Company reports that next year he expects to Sell 50,000 units of a particular product:

The Production Manager consults the storekeeper and casts his figures as follows:
Two kinds of raw materials A and B are required for manufacturing the products.
Each unit of the product requires 2 units of A and 3 units of B.
The estimated opening balances at the commencement of the next year:
Finished Products: 10,000 units
Material A 12,000 units
Material B 15,000 units

The desirable closing balances at the end of the next year are:
Finished Products: 14,000 units
Material A 13,000 units
Material B 16,000 units

Draw up a quantitative chart showing materials purchase budget for the next year.
Lesson 16
Ratio Analysis

LESSON OUTLINE

- Financial Statement Analysis, Objective and Need
- Users of Financial Data for Analysis
- Ratio Analysis – Definition, Uses, Advantages, Limitations
- Classification And Interpretation of Ratios
- Analyzing Liquidity, Leverage, Solvency and Efficiency
- Analyzing Profitability, Turnover and Operating Ratios
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

Financial Statement Analysis involves the examination of both the relationship among financial statement numbers and the trends in those numbers over time. From an investor’s point of view, predicting the future is what financial statement analysis is all about, while from the management’s standpoint, financial statement analysis is useful in helping anticipate future conditions and more importantly as a starting point as in planning actions that will improve the firm's future performance. Financial statements are very much relevant to – the management, the public, the shareholders and the lenders, the labour and trade unions, the country and economy.

Ratio Analysis is process of comparison of one figure against another, which helps to make proper analysis about the strength and weaknesses of the firm’s operations. It is extremely helpful in providing valuable insight onto company’s financial status. Ratios normally show a business strengths and weaknesses.

After studying this lesson, the student should be able to

- Understand, analyze and interpret the basic concepts of financial statement
- Understand the need and importance of financial statement analysis
- Analyze and interpret financial ratios and their significance
- Understand the objective and need of different types of ratios
INTRODUCTION

Financial Statement Analysis involves the examination of the relationship between financial statement numbers and the trends in those numbers over a period of time. From an investor’s point of view, predicting the future is what financial statement analysis is all about, while a management’s standpoint, financial statement analysis is useful in helping anticipate future conditions and, more importantly, as a for starting point in planning actions that will improve the firm’s future performance.

FINANCIAL STATEMENT ANALYSIS

It is defined as the process of identifying the financial strengths and weaknesses of a firm by adeptly establishing a relationship between the details of the Balance Sheet and the Profit & Loss Account of the enterprises.

It is a study of the relationship among various financial factors active in a business, as disclosed by a single set of statement. Moreover, a series of statements helps the analyses to study the trends of these factors.

OBJECTIVE OF FINANCIAL STATEMENT ANALYSIS

1. To help in preparing budgets and analyse the past results with respect to respect of earnings and financial position of the enterprise.
2. To make interfirm comparison of two or more firms easy.
3. To study the short-term and long-term solvency of the firm with the help of financial statement analysis. Short-term solvency is useful for creditors and long-term solvency is useful for debentureholders etc.
4. To enable the calculation of present earning capacity as well as future earning capacity of the enterprise.
5. To enable the management to find out the overall as well as department wise department of the firm on the basis of available financial information.
6. To provide reliable information about the available resources of the enterprise.
7. To provide financial information regarding economic resources and obligations of a business enterprise.

NEED FOR FINANCIAL STATEMENT ANALYSIS

The preparation of financial statements is just the starting point of the process. After the statements are prepared, they are analyzed. Analysis of the summary information in the financial statement doesn’t usually provide detailed answers to the management’s questions but it does identify the areas in which further data should be generated. Decisions are then made and implemented, and the accounting system captures the results of these decisions so that new set of financial statements can be prepared. The process then repeats itself.

Steps involved are

1) Prepare Financial Statements
2) Analyze Financial Statements
3) Gather Additional Information
4) Make Decisions
   - Operating
   - Investing
   - Financing
5) Implement Decisions and Observe Results
The important objective of financial statements is to provide information for the use of following categories of persons:

1. **Shareholders**
Financial statements act as an important source for the shareholders of the company. They can help in examining efficiency and effectiveness of the management and position, progress and prospects of the company.

2. **Lenders**
Short-term as well as long-term solvency information is needed by the lenders of the company to accurately assess the position of the business. Trade creditors are interested in short-term solvency, whereas debenture holders, long-term loan provider are interested in long-term solvency.

3. **Management**
Financial statements help the management in acquiring accurate information regarding the progress, position and prospects of the business. They help the management in finding out the relationship between the working and progress of the business; and therefore help the management in analyzing the trends in the present and future prospectus of the enterprise.

4. **Public**
Various groups such as financial analysts, lawyers, trade associations, researchers, financial press, labour unions are interested in the trend analysis, working and growth of a business. With the help of published financial information or statement of the enterprise, these interested groups are able to analyse and interpret, and therefore judge the working and growth of an enterprise.

5. **Government**
The growth of the economy is associated with the growth of the companies registered in the country. Any fraudulent activity or unscrupulous act affects the industry which percolates the growth of the economy. This can retard the economic growth of the country which would have an adverse effect on our national economy.

6. **Labour and Trade Union**
In India, workers are entitled to bonus under the payment of bonus act. Thus, the statement of Profit & Loss become greatly important to the workers.

**Techniques/Sources of Financial Statement Analysis**
Financial statements are prepared on the basis of:

a) Recorded facts
b) Accounting conventions
A number of analytical tools are used in order to simplify complex financial information and make the financial statements more useful and reliable.

Following techniques are used for analyzing financial statements.

a) Comparative Statements
b) Common – Size Statements
c) Trend Analysis
d) Ratio Analysis
e) Fund Flow Analysis
f) Cash Flow Analysis

**Comparative Statements**

Comparison of financial statements requires the comparative study of different items of financial statements of the same firm over two or more accounting periods are known as intra-firm comparison, and comparison with the financial data of another firm is known as inter-firm comparison.

Comparison and analysis of financial statements can be achieved by using:

a) Comparative Income Statement

Under comparative income statement analysis each item stated is represented as a percent of net sales.

b) Comparative Balance Sheet

Comparative balance sheets analysis is the study of the trend of the same item or group of items in two or more balance sheets of the same firm on different dates.

**Common Size Statement**

In common size financial statements, all items on the statement are expressed as a percentage of the base item. Common size statements are useful for seeing how significant the components of the individual items of the statements are.

**Trend Analysis/ Ratios**

Trend ratios can be defined as index numbers of the movements of the various financial items in the financial statements for a number of periods. It is a statistical device applied to the analysis of financial statements to reveal the trend of the items with the passage of time. Trend ratios show the nature and rate of movements in various financial factors. They provide a horizontal analysis of comparative statements and reflect the behaviour of various items with the passage of time.

**Fund Flow Analysis**

Fund Flow Statement also referred to as statement of “Source and Application of Funds” presents the movement of funds and helps to understand the changes in the structure of assets, liabilities and equity capital. Whereas, the Balance Sheet provides only a summary of the assets and liabilities at a particular point of time. It reveals
the financial state of any organization the assets side of a balance sheet shows the deployment of resources, while the liabilities side indicates its obligations. The statement of Profit and Loss shows the operating result of the business during a specified period. Both the statements provide the essential basic information about the financial activities of the business, but their usefulness is limited to analysis and planning process. From the management point of view, the usefulness of information provided by these income statements functions effectively and efficiently.

### Cash Flow Analysis

When it is required to explain to management the sources of cash and its uses during a particular period of time, a statement known as Cash Flow is prepared. The statement of cash flow reports the inflows (receipts) and outflows (payments) of cash and its equivalents of an organization during a particular period. It provides important information that compliments Statement of Profit & Loss and balance sheet. The statement of cash flow reports cash receipts and payments classified according to the entities’ major activities - operating, investing and financing during the period. This statement reports a net cash inflow or net cash outflow for each activity and for the overall business. It also reports from where cash has come and how it has been spent. It explains the causes for the changes in the cash balance. In substance, the cash flow statement summarizes a myriad of specific cash transactions into a few categories for a business entity. The statement of cash flow reports the cash receipts, cash payments, and net changes in cash resulting from operating, investing and financing activities of an enterprise during a period in a format that reconciles the beginning and ending of cash balances.

### RATIO ANALYSIS

The relationship between two accounting figures is known as ratio. Ratio analysis is a process of comparison of one figure with another, which helps to make proper analysis about the strengths and weaknesses of the firm’s operations.

The calculation of ratios are a relatively easy and simple task, but the proper analysis and interpretation of the ratios is an important task. Ratio analysis is a very powerful analytical tool useful for measuring performance of an organization. It is extremely helpful in providing valuable insight onto company’s financial picture.

### OBJECTIVES OF RATIO ANALYSIS

- To show the firm’s relative strengths and weaknesses.
- To help to analyze the past performance of the firm and to make future projections.
- To allow interested parties like shareholders, investors, creditors and the government to analyze and make evaluation of certain aspects of firm’s performance.
- To concentrate on inter-relationship among the figures appearing in the financial statements.
- To provide an easy way to compare present performance with the past.
- To depict the areas in which the business is competitively advantageous and disadvantageous.
- To determine the financial condition and performance of the firm.
- To help to make suitable corrective measures when the financial conditions and financial performance are unfavourable to the firm.

### ADVANTAGES OF RATIO ANALYSIS

1. **Simplifies Financial Statements**
   
   Ratio analysis simplifies the comprehension of financial statements. Ratios tell the whole story of changes in the financial condition of a business.
2. **Analyze Past and Forecast Future**
   It helps to analyze and understand the financial health and trend of a business, indicating past performance and making it possible to forecast the future trends.

3. **Decision-Making and Cost Control**
   It serves as a useful tool in management control process for decision-making and cost control purpose.

4. **Summaries Accounting Figures**
   It makes the accounting figures easy to understand and highlight the inter-relationship between various segments of the business.

5. **Overall Profitability**
   Different users of accounting information make use of specific ratios to meet or satisfy their requirements. But the management is always interested in overall profitability and efficiency of the business enterprise.

6. **Liquidity Position**
   The short-term creditors are more interested in the liquidity position of a firm in the sense that their money would be repaid on due dates. The ability of the firm to pay short-term obligations can be found by computing liquidity ratios.

7. **Long-term Solvency**
   This is required by long-term creditors, security analyst and the present and potential shareholders of the company. The help of capital structure ratios kept the above in assessing the financial status of the organization.

**LIMITATIONS OF RATIO ANALYSIS**

The ratio analysis is not a full-proof method in financial statement analysis. It suffers from a number of limitations. Some of the important one are:

1. **Ratios ignore qualitative factors**
   Ratios are obtained from the figures expressed in monetary terms. In this way, qualitative factors, which may be important are ignored.

2. **Trends are not the actual ratios**
   The different ratios calculated from the financial statements of a business enterprise for one single year are of limited value. It would be more useful to calculate the important figures in the case of income, dividends, working capital, etc., for a number of years. Such trends are more useful than absolute ratios.

3. **Defective accounting information**
   The ratios are calculated from accounted data in the financial statements. It means if the information is defective then the calculation of ratios would be wrong. Thus, the deliberate omissions would affect the ratios too.

4. **Change in accounting procedures**
   A comparison of result of two firms becomes difficult when we find that the firms are using different procedures related to certain items, such as inventory valuation and treatment of intangible assets.

5. **Variations in general operating conditions**
   While interpreting the results based on ratio analysis, all business enterprises have to work within given general economic conditions, state of the industry in which the firms are operating and the position of the individual companies within the industry. For example, if the firm is forced by the government to sell their products at a fixed price, its comparison with other firms would become impossible.
6. **Single ratio not sufficient**

It is very necessary to take into account the combined effect of various ratios so that the results are correctly interpreted regarding the financial condition and the profit-making performance of the business. Each ratio plays a part in interpreting the financial statement.

7. **The use of standard ratio**

The financial statements represent historical data and, therefore, the ratios based on them would only disclose what happened in the past.

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**CLASSIFICATION OF RATIOS**

**Functional Classification**

The classification of ratios according to the purpose of its computation is known as functional classification. On this basis ratios are categorized as follows:

**Profitability Ratios:** Profitability ratios gives some yardstick to measure the profit in relative terms with reference to sales, assets or capital employed. These ratios highlight the end result of business activities. The main objective is to judge the efficiency of the business.

**Turnover Ratios or Activity Ratios:** These ratios are used to measure the effectiveness of the use of capital/assets in the business. These ratios are usually calculated on the basis of sales or cost of goods sold, and are expressed in integers rather than as percentages.

**Financial Ratios or Solvency Ratios:** These ratios are calculated to judge the financial position of the organization from short-term as well as long-term solvency point of view. Thus, it can be subdivided into: (a) Short-term Solvency Ratios (Liquidity Ratios), and (b) Long-term Solvency Ratios (Capital Structure Ratios).

**Market Test Ratios:** These are, of course, some profitability ratios, having a bearing on the market value of the shares.

The ratio analysis is made under the following categories

<table>
<thead>
<tr>
<th>FINANCIAL RATIOS</th>
<th>ACTIVITY RATIOS</th>
<th>PROFITABILITY RATIOS</th>
<th>MARKET TEST RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-Term Solvency Ratios</td>
<td>Stock Turnover Ratio</td>
<td>Gross Profit Ratio</td>
<td>Earning Per Share</td>
</tr>
<tr>
<td>• Current Ratio</td>
<td>Debtors Turnover Ratio</td>
<td>Net Profit Ratio</td>
<td>Price Earning Ratio</td>
</tr>
<tr>
<td>• Liquidity Ratio</td>
<td>Creditors Turnover Ratio</td>
<td>Cash Profit Ratio</td>
<td>Dividend Payout</td>
</tr>
<tr>
<td>• Cash Ratio</td>
<td>Fixed Assets Turnover Ratio</td>
<td>Return on Investment</td>
<td>Dividend Yield Ratio</td>
</tr>
<tr>
<td>Long-Term Solvency Ratios</td>
<td>Total Assets Turnover Ratio</td>
<td>Return on Net Worth</td>
<td></td>
</tr>
<tr>
<td>• Debt – Equity Ratio</td>
<td>Working Capital Turnover</td>
<td>Debt service Coverage</td>
<td></td>
</tr>
<tr>
<td>• Capital Gearing Ratio</td>
<td>Sales to Capital Employed</td>
<td></td>
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<tr>
<td>• Fixed Asset Ratio</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Proprietary Ratio</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Interest Cover</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dividend Cover</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FINANCIAL RATIOS

Short-Term Solvency Ratios

Liquidity or short-term solvency means ability of a business to pay its short-term liabilities. Inability to pay off short-term liabilities affects its credibility as well as its credit rating. Short-term lenders and creditors of a business are very much interested to know its state of liquidity because of the states they have in the business. Two ratios are used to highlight the business ‘liquidity’. These are current ratio and quick ratio.

1. **Current Ratio**
   
   This ratio is calculated as follows
   
   \[
   \text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
   \]
   
   The ideal current ratio is taken as 2 : 1 (The ideal Current Ratio preferred by Banks is 1.33 : 1)
   
   This ratio measures the short-term solvency of the company.
   
   Current Assets are the assets which can be converted into cash within a year.
   
   Current Liabilities are the liabilities that are payable within a year.
   
   **Significance**: A very high ratio will have adverse impact on the profitability of the organization. A high current ratio may be due to high level of inventory, inefficiency in collection of debtors, high balance in cash and bank accounts without proper investments.

2. **Liquid Ratio / Quick Ratio / Acid Test Ratio**

   This ratio is calculated as follows
   
   \[
   \text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}
   \]
   
   The ideal liquid ratio is taken as 1:1
   
   Liquid Assets would include cash in hand, cash at bank, sundry debtors excluding bad debts and readily marketable securities. Prepaid expenses and stock are not taken as liquid assets.
   
   Bank overdraft and credit facilities are excluded from current liabilities in such a case.

Long-Term Solvency Ratios

1. **Debt-Equity Ratio**

   It is calculated in following ways
   
   \[
   \text{Debt – Equity Ratio} = \frac{\text{Long Term Debts}}{\text{Equity}}
   \]
   
   \[
   = \frac{\text{Total Liabilities}}{\text{Shareholder’s Fund}}
   \]
   
   The ideal ratio is 2:1 if calculated by first formula; and 0.67:1 if calculated by second formula.
   
   **Significance**: The debt-equity ratio is used to ascertain the soundness of long-term financial policies of the business. The main purpose of this ratio is to determine the relative stakes of outsiders and shareholders.
2. **Capital-Gearing Ratio**

   It is calculated as follows
   
   \[
   \text{Capital-Gearing Ratio} = \frac{\text{Fixed Income / Dividend Bearing Funds}}{\text{Equity Shareholders Funds}}
   \]

   **Fixed Income Bearing Funds** = Debentures + Long Term Loans + Preference Share Capital.

   **Equity Shareholders Funds** = Equity share capital + Reserves & Surplus – Debit balance of P&L – Fictitious Assets

   **Significance**: It is a very important ratio. Gearing should be kept in such a way that the company is able to maintain a steady rate of dividend. High gearing ratio is not good for a new company or a company for which future earnings are uncertain.

3. **Fixed Assets Ratio**

   It is shown as a proportion to long-term funds
   
   \[
   \text{Fixed Asset Ratio} = \frac{\text{Fixed Assets}}{\text{Long Term Funds}}
   \]

   **Significance**: This ratio indicates the proportion of long-term funds deployed in fixed assets. The higher the ratio indicates the safer the funds are available in case of liquidation. It also indicates the proportion of long-term funds that is invested in working capital.

4. **Proprietary Ratio**

   It expresses the relationship between net worth and total assets
   
   \[
   \text{Proprietary Ratio} = \frac{\text{Proprietary Funds}}{\text{Total Assets}}
   \]

   **Proprietary Funds** = Equity share capital + Preference share capital + Reserves – Fictitious Assets

   **Total Assets** = Fixed Assets + Current Assets (Excluding Fictitious Assets)

   **Significance**: A high proprietary ratio is indicative of strong financial position of a business. The higher the ratio, the better it would be.

5. **Interest Cover / Debt Service Ratio**

   Interest Cover are Ratio = \(
   \frac{\text{Earnings Before Interest And Taxes (EBIT)}}{\text{Interest Expenses}}
   \)

   An interest cover of 7:1 is considered reasonable by financial institution.

   **Significance**: The Interest Coverage Ratio shows how many times interest charges are covered by funds that are available for payment of interest. A very high ratio indicates that the firm is conservative in using the debt, and a very low ratio indicates excessive use of debt.

6. **Dividend Cover**

   Dividend Cover = \(
   \frac{\text{Profit After Tax (PAT)}}{\text{Dividend}}
   \)

   This ratio indicates the number of times the dividend is covered by net profit. This highlights the amount retained by a company for financing its future operations.
PROFITABILITY RATIOS

1. **Gross Profit Ratio**
   The ratio measures the gross profit margin on the total net sales made by the company.
   
   It is calculated as follows:
   \[ \text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100 \]

2. **Net Profit Ratio**
   This ratio measures the efficiency of operation of the company. The net profit is arrived at from gross profit after deducting administration, selling and distribution expenses. The ratio is calculated as follows:
   \[ \text{Net Profit Ratio} = \frac{\text{Profit after Tax (PAT)}}{\text{Sales}} \times 100 \]

3. **Return on investment**
   This ratio shows how much a company is earning on its investment i.e. capital employed. This ratio reflects the overall efficiency with which capital is used. Return on investment is an important measure of profitability and is useful for inter-firm comparison.
   \[ \text{Return on Investment} = \frac{\text{Operating Profit (EBIT)}}{\text{Capital Employed}} \times 100 \]

4. **Return On Assets**
   It is calculated as follows:
   \[ \text{Return on Assets} = \frac{\text{Profit After Tax (PAT)}}{\text{Net Assets}} \times 100 \]
   
   The profitability of the firm is measured by establishing the relation of net profit with the total assets of the organization. This ratio indicates the efficiency of utilization of assets in generating revenue.

5. **Return on Net Worth**
   It is calculated as follows:
   \[ \text{Return on Net Worth} = \frac{\text{Profit after Tax (PAT)}}{\text{Net Worth}} \times 100 \]

6. **SALES TO CAPITAL EMPLOYED RATIO**
   This ratio indicates the efficiency in utilization of capital employed in generating revenue.
   \[ \text{Sales to Capital employed ratio} = \frac{\text{Sales}}{\text{Capital employed}} \]

MARKET TEST RATIOS

1. **Earning Per Share (EPS)**
   This ratio is calculated to judge the overall profitability of the organization. The ratio measures the profit available for the equity shareholders on a per share basis.
   
   It also helps in determining the market price of the equity share of the company and the company’s capacity to pay dividend. The more the earning per share, the better are the performance and prospects of the company.
Lesson 16  ■  Ratio Analysis 445

Earning Per Share (EPS) = \( \frac{\text{Profit available for Equity Shareholders}}{\text{No. of Equity Shares}} \)

2. **Price-Earning Ratio (P/E Ratio)**

This ratio measures the number of times the earning of the latest year, at which the share price of the company is quoted. P/E ratio is the barometer of the market sentiment.

A high P/E ratio reflects high earnings potential, and a low P/E ratio reflects lower earnings potential.

\[ \text{P/E Ratio} = \frac{\text{Market Price}}{\text{EPS}} \]

3. **Dividend Payout Ratio**

This ratio expresses the relationship between what is available as earning per share and what is actually paid in the form of dividends out of the available earnings.

A higher pay out ratio means a lower retention and ploughing back of profits, a deteriorating liquidity position an increase in the profit earning capacity of the company.

\[ \text{Dividend Payout Ratio} = \frac{\text{Dividend Per Share (DPS)}}{\text{EPS}} \]

4. **Dividend Yield Ratio**

This ratio reflects the percentage yield that an investor receives on his investment at the current market price of the shares. This measure is useful for investors who are interested in yield per share rather than capital appreciation.

\[ \text{Dividend Yield Ratio} = \frac{\text{Dividend Per Share}}{\text{Market Price}} \times 100 \]

**TURNOVER RATIOS**

Turnover ratios are useful to measure how effectively the firms employ its resources.

1. **Stock Turnover Ratio / Stock Velocity**

This ratio measures how many times a company’s inventory has been sold during the year. If inventory turnover ratio is low, it means either the inventory is growing or the sale are dropping.

\[ \text{Stock Turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average Stock}} \]

OR

\[ \frac{\text{Raw Material Consumed}}{\text{Average stock of Raw Material}} \]

\[ \text{Average Stock} = \frac{\text{Opening stock} + \text{closing stock}}{2} \]

\[ \text{Stock Velocity} = \frac{\text{Average Stock}}{\text{Cost of goods sold}} \times 365 \text{ days or 12 months} \]

2. **Debtors Turnover RTIO / Debtors Velocity**

It measures whether the resources tied up in debtors is reasonable and whether the company has been efficient in converting debtors into cash.
Debtors Turnover Ratio = \( \frac{\text{Credit Sales}}{\text{Average accounts receivables}} \)

Accounts receivables include debtors and bills receivables

The higher the ratio, the better the position

Debtors velocity = \( \frac{\text{Average Accounts Receivables}}{\text{Credit Sales}} \times 365 \text{ days or 12 months} \)

The lower the velocity, the better is the position

3. **Creditors Turnover Ratio / Creditors Velocity**

Creditors Turnover Ratio = \( \frac{\text{Credit Purchases}}{\text{Average Accounts payable}} \)

Accounts payable include creditors and bills payable

Creditors velocity = \( \frac{\text{Average Accounts Payable}}{\text{Credit Purchases}} \times 365 \text{ days or 12 months} \)

Longer credit period or velocity is considered better, because it means that the company’s operations are financed interest free by the suppliers.

4. **Working Capital Turnover Ratio**

This ratio indicates the extent of working capital turnover in achieving sales of the firm:

Working capital Turnover Ratio = \( \frac{\text{Sales}}{\text{Working Capital}} \)

5. **Fixed Asset Turnover Ratio**

This ratio indicates the number of times fixed assets are being turned over in a year:

Fixed Asset Turnover Ratio = \( \frac{\text{Sales}}{\text{Fixed Assets}} \)

6. **Total Assets Turnover Ratio**

This ratio indicates the number of times total assets are being turned over in a year:

Total Assets Turnover Ratio = \( \frac{\text{Sales}}{\text{Total Assets}} \)

**OPERATING RATIO**

Operating Ratio = \( \frac{\text{Operating Cost}}{\text{Sales}} \times 100 \)

Operating cost = Material cost + Labour cost + Factory overheads + office & selling expenses

**Illustration 1**

From the following information, prepare the balance sheet of Copper company:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td>Rs 10,50,000</td>
</tr>
<tr>
<td>Finished goods turnover ratio (on cost of sales)</td>
<td>2</td>
</tr>
<tr>
<td>Finished goods turnover ratio(on cost of sales)</td>
<td>6</td>
</tr>
<tr>
<td>Gross profit on sales</td>
<td>25%</td>
</tr>
</tbody>
</table>
Net profit(before interest) to sales 8%
Fixed charge cover (debenture interest 7%) 8
Debt collection period 1.5 Months
Material consumed to sales 30%
Stock of raw material 3
(in term of months consumption)
Current ratio 2.4
Quick ratio 1
Reserve to capital ratio 0.21

Solution:

Balance Sheet of Copper

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount</th>
<th>Assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>10,00,000</td>
<td>Fixed Assets</td>
<td>3,50,000</td>
</tr>
<tr>
<td>Reserves &amp; Surplus</td>
<td>2,10,000</td>
<td>Current Assets</td>
<td>3,50,000</td>
</tr>
<tr>
<td>Debenture</td>
<td>12,10,000</td>
<td>Debtors</td>
<td>2,10,000</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>4,00,000</td>
<td>Stock of Finished goods</td>
<td>10,50,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stock of Raw Material</td>
<td>9,60,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash &amp; Bank</td>
<td>20,10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Bal. Fig.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20,10,000</td>
<td></td>
<td>20,10,000</td>
</tr>
</tbody>
</table>

Calculation of cost of sales

Fixed Asset Turnover Ratio = Cost of Sales / Fixed Assets
2 = x/10,50,000
X= Cost of Sales = 21,00,000

Calculation of Sales

Gross Profit = 25% on sales or 33.33% on cost
Gross Profit = 33.33% x 21,00,000 = 7,00,000
Sales = Cost of sales + Gross profit
= 21,00,000 + 7,00,000
= 28,00,000
**Calculation of Finished Goods Stock**

Finished goods turnover ratio = cost of sales / Finished goods

\[ 6 = \frac{21,00,000}{x} \]

\[ X = \text{finished goods} = 3,50,000 \]

**Calculation of Net Profit Before Interest**

EBIT = sales x 8%

\[ = 28,00,000 \times 8\% = 2,24,000 \]

**Calculation of Debentures**

Fixed charge cover = EBIT / Interest

\[ 8 = \frac{2,24,000}{x} \]

\[ X = \text{interest} = 28,000 \]

Rate of debenture interest = 7%

So, Debentures = 100 x 28,000 / 7

\[ = 4,00,000 \]

**Calculation of Debtors**

Debt collection period = debtors / credit sales x 12

\[ 1.5 = \frac{x}{28,00,000} \times 12 \]

Debtors = 3,50,000

**Calculation of Raw Material Stock**

Material consumed = sales x 30%

\[ = 28,00,000 \times 30\% = 8,40,000 \]

Raw material stock velocity = stock of raw material / material consumed x 12

\[ 3 = \frac{\text{stock}}{8,40,000} \times 12 \]

Stock of raw material = 2,10,000

**Calculation of Current Assets and Current Liabilities**

Total stock = stock of raw material + stock of finished goods

\[ = 2,10,000 + 3,50,000 \]

\[ = 5,60,000 \]

Current Ratio = Current Assets / current liabilities

\[ 2.4 = \frac{x}{y} \]

\[ 2.4y = x \]
Quick ratio = current assets – stock / current liabilities
1 = 2.4y – 5,60,000 / y
Y = current liabilities = 4,00,000
Current assets = 2.4 y
= 2.4 x 4,00,000 = 9,60,000

Calculation of Reserves & Surplus
Net Worth = Fixed Assets + Current Assets – Current Liabilities – Debentures
= 10,50,000 + 9,60,000 – 4,00,000 – 4,00,000
= 12,10,000
Reserve to capital = Reserves / Capital
0.21 = x/y
0.21y = x
Net Worth = Capital + Reserves
12,10,000 = y + 0.21 y
Capital = y = 10,00,000
Reserves = x = 10,00,000 x 0.21 = 2,10,000

Illustration 2.
From the following information, calculate the value of
a) Sales
b) Debtors
c) Closing stock
d) Creditors
Debtors velocity
Stock velocity
Creditors velocity
Gross Profit
Gross profit for the year is Rs 5,00,000. Stock of the year is Rs 20,000 more than what it was in the beginning. Bills receivables & bills payable were Rs 60,000 & Rs 336,667, respectively.

Solution:
Calculation of sales
Gross profit ratio = gross profit / sales x 100
20 = \frac{5,00,000}{\text{sales}} x 100
Sales = 25,00,000
Calculation of debtors

Debtors velocity = accounts receivables / credit sales x 12

\[ \frac{x}{25,00,000} \times 12 = 3 \]

Accounts receivables = x = 6,25,000

Accounts receivables = bills receivables + debtors

6,25,000 = 60,000 + Debtors

Debtors = 5,65,000

Calculation of closing stock

Cost of goods sold = sales – gross profit

\[ = 25,00,000 – 5,00,000 \]

\[ = 20,00,000 \]

Stock velocity = average stock / cost of goods sold x 12

\[ \frac{\text{Avg. Stock}}{20,00,000} \times 12 = 6 \]

Avg. stock = 10,00,000

Avg. stock = opening stock + closing stock / 2

\[ 10,00,000 = \frac{x + x + 20,000}{2} \]

Opening stock = x = 9,90,000

Closing stock = x + 20,000

9,90,000 + 20,000 = 10,10,000

Calculation of creditors

Cost of goods sold = opening stock + Purchases – closing stock

\[ 20,00,000 = 9,90,000 + x – 10,10,000 \]

Purchases = x = 20,20,000

Creditors velocity = accounts payable / credit purchases x 12

\[ \frac{x}{20,20,000} \times 12 = 2 \]

Accounts payable = 3,36,667

Accounts payable = creditors + bills payable

3,36,667 = creditors + 36,667

Creditors = 3,00,000

Illustration 3.

Closing debtors Rs 2,00,000, cash sales 25% of credit sales, excess of closing debtors over opening debtors Rs 80,000, Total sales Rs 12,00,000.

Calculate debtors turnover ratio and average collection period.
Solution:
Total sales = 12,00,000
Cash sales = 25% of credit sales
Total sales = cash sales + credit sales
Cash sales = 25 / 125 x 12,00,000
= 2,40,000
Credit sales = 100/125 x 12,00,000
= 9,60,000
Closing debtors = 2,00,000
Opening debtors = 2,00,000 – 80,000
= 1,20,000
Average debtors = opening debtors + closing debtors / 2
= 1,20,000 + 2,00,000 / 2
= 1,60,000

Debtors Turnover Ratio
= credit sales / average debtors
= 9,60,000 / 1,60,000
= 6 times

Average Collection Period
= 12 / debtors turnover
= 12/6
= 2 times

Illustration 4.
Calculate Debt – Equity Ratio

Debentures
Creditors
Long-term loans
Share capital
Reserve fund
Preliminary expense

Solution:
Debt = debentures + Long term loans
= 4,00,000 + 8,00,000
= 12,00,000
Equity = Share capital + reserve fund – preliminary expenses
= 2,00,000 + 1,20,000 – 20,000
= 3,00,000

Debt – equity ratio = debt / equity
12,00,000 / 3,00,000
= 4

**Illustration 5.**
From the following information calculate stock at the end:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>opening stock</td>
<td>62,000</td>
</tr>
<tr>
<td>purchases</td>
<td>4,20,000</td>
</tr>
<tr>
<td>sales</td>
<td>6,00,000</td>
</tr>
<tr>
<td>gross profit</td>
<td>33.33%</td>
</tr>
</tbody>
</table>

**Solution:**
Let the cost of goods = Re 1
Gross profit = 33.33% of Re 1 = 1/3
Sales = Cost Of Goods Sold (COGS) + Gross Profit
= 1 + 1/3
= 4/3
If sales are 4/3, COGS is 1
If sales are 1, COGS = 1 x ¾
If sales are Rs 6,00,000 , COGS = 1 x ¾ x 6,00,000 = Rs 4,50,000
COGS = opening stock + Purchases – closing stock
Closing stock = opening stock + purchases – COGS
= 62,000 + 4,20,000 - 4,50,000
= 32,000

**Illustration 6.**
Balance sheet and income statement of AG Ltd for the year ended 31.03.2017 are as under:

**Income Statement of AG Ltd.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (in ‘000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1600</td>
</tr>
<tr>
<td>Less: COGS</td>
<td>(1310)</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>290</td>
</tr>
</tbody>
</table>
### Lesson 16  ■  Ratio Analysis 453

Less: Selling & Distribution expenses  (40)
EBIT  250
Less: Interest  (45)
EBT  205
Less: Tax  (82)
Net profit  123

**BALANCE SHEET OF AG LTD**

**LIABILITIES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (in '000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid up capital</td>
<td></td>
</tr>
<tr>
<td>Equity share capital of Rs 10 each</td>
<td>400</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>120</td>
</tr>
<tr>
<td>Debentures</td>
<td>700</td>
</tr>
<tr>
<td>Creditors</td>
<td>180</td>
</tr>
<tr>
<td>Bills payable</td>
<td>20</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>80</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>1500</strong></td>
</tr>
</tbody>
</table>

**ASSETS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (in '000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net fixed assets</td>
<td>800</td>
</tr>
<tr>
<td>Inventories</td>
<td>400</td>
</tr>
<tr>
<td>Debtors</td>
<td>175</td>
</tr>
<tr>
<td>Marketable securities</td>
<td>75</td>
</tr>
<tr>
<td>Cash</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>1500</strong></td>
</tr>
</tbody>
</table>

Price per share Rs 15

**INDUSTRY’S AVERAGE RATIOS**

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio</td>
<td>2.4</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>1.5</td>
</tr>
<tr>
<td>Sales to stock</td>
<td>8 times</td>
</tr>
<tr>
<td>Avg collection period</td>
<td>36 days</td>
</tr>
<tr>
<td>Debt to assets</td>
<td>40%</td>
</tr>
<tr>
<td>Debt equity</td>
<td>2:1</td>
</tr>
<tr>
<td>Interest earned</td>
<td>6 times</td>
</tr>
<tr>
<td>Net profit</td>
<td>7%</td>
</tr>
<tr>
<td>Price to earnings</td>
<td>15</td>
</tr>
<tr>
<td>Return to total assets</td>
<td>11%</td>
</tr>
</tbody>
</table>
From the above information

a) Calculate all the relevant ratios and as a company secretary interpret them to identify the problematic areas, clearly and bring out the reason in respect of identified problem.

**Solution:**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Formula</th>
<th>AG Ltd</th>
<th>Industry</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
<td>Current assets / current liabilities</td>
<td>700/280 = 2.5</td>
<td>2.40</td>
<td>Current ratio is slightly high as compared to the industry average ratio. This is due to high level of stock.</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>Quick assets / current liabilities</td>
<td>300/280 = 1.07</td>
<td>1.5</td>
<td>Ratio is less as compared to the industry average. But at the same time it is noted that both quick ratio and current ratio are high which represents heavy accumulation of stock.</td>
</tr>
<tr>
<td>Sales to Stock Ratio</td>
<td>Sales / stock</td>
<td>1600/400 = 4 360 /4 = 90 dys</td>
<td>8 45 days</td>
<td>This ratio is weak as stock remains without movement for 108 days, whereas for other firms in the industry it remains for 37 days.</td>
</tr>
<tr>
<td>Avg Collection Period</td>
<td>Debtors/credit sales x 360</td>
<td>175/1600 x360 =40 days</td>
<td>36 days</td>
<td>Ratio is satisfactory as compared to the Industry ratio.</td>
</tr>
<tr>
<td>Debt to Assets</td>
<td>Debt/total assets x100</td>
<td>700/1500 x 100 = 46.67%</td>
<td>40%</td>
<td>This ratio is used to ascertain the soundness of long-term financial policies of the business. The ratio is satisfactory as it is near to industry ratio.</td>
</tr>
<tr>
<td>Debt Equity</td>
<td>Debt/equity</td>
<td>700/620 = 1.13</td>
<td>2</td>
<td>The ratio is low which shows that long-term financial options are not properly availed by the company.</td>
</tr>
<tr>
<td>Interest Earned</td>
<td>EBIT/Interest</td>
<td>250/45 = 5.55</td>
<td>6</td>
<td>The ratio indicates that the firm is conservative in using debt.</td>
</tr>
<tr>
<td>Price to Earnings</td>
<td>Market price/EPS</td>
<td>15/3.075 = 4.88</td>
<td>15</td>
<td>Low ratio indicates low earning potential and less market confidence in the company’s equity</td>
</tr>
<tr>
<td>Return to Total Assets</td>
<td>Net profit/total assets x 100</td>
<td>1231500 x 100 = 8.2%</td>
<td>11%</td>
<td>The ratio is less and hence the position is not satisfactory.</td>
</tr>
</tbody>
</table>
Financial statement analysis is the examination of the relationship among financial statement numbers and the trends in those numbers over time.

Financial statement analysis is a study of relationship among various financial factors in a business as disclosed by a single set of statements, and study of the trends of these factors as shown in a series of statements.

Steps involved for financial statement analysis are – Prepare financial statements, analyze financial statements, gather additional information, make decisions related to operating/investment, financing, and implement decisions and observe results.

Financial statements are prepared on the basis of (i) recorded facts; (ii) accounting conventions; (iii) postulates; (iv) personal judgements, and (v) accounting standards and guidance notes.

According to the objective of analysing financial statement, the analysis can be long-term as well as short-term.

Ratio analysis is a process of comparison of one figure with the other, which helps to make proper analysis about the strengths and weaknesses of a firm’s operations.

The functional ratios can be further classified into - profitability ratios, turnover ratios or activity ratios, financial ratios or solvency ratios and market test ratios.

Liquidity or short-term solvency means ability of the business to pay its short-term liabilities.

The debt equity ratio is used to ascertain the soundness of long-term financial policies of a business.

The interest coverage ratio shows how many times interest charges are covered by funds that are available for payment of interest.

P/E ratio is the barometer of the market sentiment.

Turnover ratios are useful to measure how effectively firms employ its resources.

Operating cost = Material cost + Labour cost + Factory overheads + office & selling expenses

**SELF TEST QUESTIONS**

Q1. Explain the different ratios that are commonly used and show how they are useful in financial analysis?

Q2. Write short notes on the following:
   a) Financial Statement Analysis
   b) Profitability Ratio
   c) Turnover Ratio

Q3. What are the objectives of ratio analysis?

Q4. Calculate Return on Share Capital

10% Preference Share Capital Rs 2,00,000
32,000 Equity Shares of Rs 10 each Rs 3,20,000
Reserves & Surplus Rs 12,80,000
Net profit after tax Rs 4,75,000
Q5. Calculate
   
a) Current ratio
   b) Net profit ratio
   c) Gross profit ratio

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>Rs 1,40,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>Rs 10,000</td>
</tr>
<tr>
<td>Net profit</td>
<td>Rs 6,000</td>
</tr>
<tr>
<td>Bills receivables</td>
<td>Rs 2,000</td>
</tr>
<tr>
<td>Debtors</td>
<td>Rs 8,200</td>
</tr>
<tr>
<td>Stock</td>
<td>Rs 10,000</td>
</tr>
<tr>
<td>Cash</td>
<td>Rs 6,000</td>
</tr>
<tr>
<td>Creditors</td>
<td>Rs 12,000</td>
</tr>
<tr>
<td>Bills payable</td>
<td>Rs 8,800</td>
</tr>
</tbody>
</table>

Q6. Calculate the creditors turnover ratio and debt payment period:

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total purchases</td>
<td>Rs 9,80,000</td>
</tr>
<tr>
<td>Cash purchases</td>
<td>Rs 1,85,000</td>
</tr>
<tr>
<td>Opening creditors</td>
<td>Rs 61,400</td>
</tr>
<tr>
<td>Closing creditors</td>
<td>Rs 56,600</td>
</tr>
<tr>
<td>Purchase returns</td>
<td>Rs 10,200</td>
</tr>
<tr>
<td>Bills payable in the beginning</td>
<td>Rs 45,000</td>
</tr>
<tr>
<td>Bills payable at the end</td>
<td>Rs 57,000</td>
</tr>
</tbody>
</table>

Q7. Prepare Balance Sheet and Profit and Loss Account from the following information:

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>4,00,000</td>
</tr>
<tr>
<td>Working capital</td>
<td>1,80,000</td>
</tr>
<tr>
<td>Bank overdraft</td>
<td>30,000</td>
</tr>
</tbody>
</table>

   There is no fictitious asset. Current assets contain only stock, debtors and cash.

   The following additional data is also available:
   
   (i) Closing stock is 20% higher than opening stock
   (ii) Current ratio - 2.5
   (iii) Quick ratio - 2.0
   (iv) Proprietary ratio - 0.6 (Fixed assets: Proprietary fund)
   (v) Gross profit ratio - 20% (of sales)
   (vi) Stock velocity - 5
   (vii) Debtor’s velocity - 73 days
(viii) Net profit ratio - 10% (to average capital employed).

Q8. Calculate working capital turnover ratio from the following information:
   Current ratio = 5:3
   Quick ratio = 3:5
   Inventory turnover ratio = 5 times
   Closing Stock was Rs 1,92,000 less than opening stock
   Gross profit = 25% on cost
   Average debt collection period = 3 months
   Cash sales = 25% of Total sales
   Opening debtors = Rs 2,80,000
   Closing debtors = Rs 3,20,000

Q9. From the following information you are required to calculate-
   (i) Sales;
   (ii) Sundry Debtors;
   (iii) Sundry Creditors;
   (iv) Closing stock;
   Debtors velocity ratio 3 months
   Stock velocity ratio 6 months
   Creditors velocity ratio 2 months
   Gross profit ratio 25%

   The gross profit for the year ended 31st March 2018 was Rs 5,00,000. Stock for the same period was Rs 20,000, more than it was in the beginning of the year. Bills receivable and bills payable were Rs 1,50,000 and Rs 83,333, respectively.

Q10. Calculate
   a) Debt – equity ratio
   b) Return on capital employed
   c) Interest coverage ratio
   d) Capital gearing ratio

   Earning before tax Rs 15,00,000
   Preference shares Rs 3,00,000
   Equity share capital Rs 60,00,000
   10% Debentures Rs 15,00,000
Lesson 17
Management Reporting (Management Information Systems)

LESSON OUTLINE

– Meaning of Management Reporting
– Importance of Reporting
– Level of Management & Reporting
– The Need for Management Reporting
– Essential Components to Management Reporting
– General Principles of Report Presentation
– Forms of Presentation of Information
– Classification of Reports
– Forms of Reporting
– Frequency of Reporting
– Special Reports
– LESSON ROUND UP
– SELF TEST QUESTIONS

LEARNING OBJECTIVES

With a growing global economy, executives are continuously striving to build and enhance a competitive advantage through timely and actionable data. Advances in technology allow smaller companies to efficiently communicate and operate globally, but employees must have access to relevant data to continue to give profitable growth. Effective management reporting provides a greater depth of information to empower executives to make pertinent business decisions, increasing operating efficiency, and thus remain competitive.

Therefore, the objective of the lesson is to enable the student to understand the meaning and importance of management reporting. They will become conversant with various levels of management and how the reporting is effective at all levels. Management reporting plays a vital role in the decision-making process so the presentation of the report also plays an important role.

After going through this lesson the students will be able to:

– Understand the meaning & importance of Management Reporting.
– Understand each level of management & reporting thereof.
– Understand the general principles of report presentation.
– Understand the classification and forms of reporting.
– Understand the frequency of reporting as per the different levels of management.
INTRODUCTION

Accounting is an information system that attempts to pass on information in the form of reports, statements, charts and graphs to help the management in taking appropriate decisions. Management needs information for arriving at decisions and for evaluating the company performance to run the business effectively. The required information can be made available to the management by means of reports.

Reports can be defined as means of communication, usually in the written form, of facts which should be brought to the attention of the various levels of management that can use them to take suitable actions for proper control. For proper control the reports have to be prepared and presented in an appropriate manner. A systematic reporting system should be adopted for smooth flow of business.

Importance of Reporting

1. **Provides Information**: The very purpose of preparing a report is to providing information to various levels of management. The term management includes Foreman, Chairman, Department Manager, General Manager and Special Officer. These people get information about the trend of the business, cash flow and fund flow, etc.

2. **Helps in Selection**: Out of the several points available, only relevant information is included in the report. A report brings many alternatives out of which a management has to choose one profitable alternative.

3. **Role in Control System**: A target is fixed well in advance in an organization. The management has to see whether the employees are working according to the targets and predetermined standards. The reports are prepared in such a way so as to evaluate the actual performance with the budgeted targets. If there are any unfavorable variances, the reasons are found out and remedial or corrective actions are taken by the management. In this way, a report is used as a control tool. A management can control the enterprises with the help of this tool.

4. **Helpful in Profitable Operations**: A report highlights the direction in which the business should move and the level of operation should be decided. On the basis of such report, a management can give clear cut instructions as how to increase the profitability to its organization.

5. **Follow the Principle of Management by Exception**: A management has very little time to exercise the control. Hence, the activities, which are not carried out according to planning and budgeting, are highlighted before the management. This is called the way of following the principle of management by exception.

6. **Helpful in Achieving Overall Objectives**: Report motivates the executives and employees to take necessary steps towards increasing the earnings of the organization significantly. In this way, the management reaps achieving the maximum profit with the help of right kind of reporting system.

LEVEL OF MANAGEMENT AND REPORTING

The fundamental principle of the system of reporting is that the information contained therein should meet the requirements of its recipient. Reports are prepared for each executive from the bottom to the highest level of management keeping in view his status and responsibility in the organization, so that he may be able to get timely information about the performance of persons working under him.

In any organization, there are three distinct levels of managements - first line managements, middle line management and top management.
The information presented and the method of reporting should meet the specific requirements of all these levels of management.

The three Guiding Principles to be followed are:

1) The lower the level of management, the more detailed should the report; the higher the level of management, more summarized should the report be.

2) The lower the level of management, should get the report its more frequently whereas the higher level of management should get the reports less frequently. Middle management requires more detailed reporting with a great frequency in reporting as compared to the top management, because the former is concerned with day to day operations requiring timely action for making improvements.

3) Lower the level of management, less should be number of reports; higher the level of management, large should be the number report. The Board of Directors will receive a large number of reports because the control every function n the organization. Person included in middle management and lower management will receive only those reports which relate to their departments.

**MEANING OF MANAGEMENT REPORTING:**

The Management Reporting System is essentially a mechanism for monitoring the 'mission' of an organization in terms of objectives set out evolved by the organization with a formal planing.

If the formal plan is imprecise or inadequate, and facts to take into account the actuality of the real-life situation, the de facto points of decision-making, and the recipient personnel, the monitoring system becomes open-ended and ineffective. Designers of the reporting system must, therefore, take into account the impact on it of such constraints. Merely a good management reporting system does not an organization successful. It is the people working in that organization work towards its success. Yet, a lack of a proper reporting system which could perculate at all level would allow the management to take remedial action.

**The Need for Management Reporting**

Inefficient reporting processes that yield inaccurate and outdated information normally cause more harm than good. A strong management reporting is a necessity to produce timely and reliable information in order to make high-quality business decisions about the future of the company. Insight gathered from reporting allows for deeper analysis to understand problems, provides accurate comparisons against competitors and implement controls to hold employees accountable for budgets.

Effective processes uncover material financial misstatements prior to circulating information with investors and other stakeholders, and identify and address problem areas before they elevate to unmanageable levels. Without management reporting, employees may know there is a problem, but would be unable to identify its origin. Reporting identifies the problem's source, so you can begin working toward a solution. It also allows you to understand your current financial position compared to your competitors, in order to focus or realign business strategies to improve specific operating activities.
Often, businesses attempt to develop reporting processes, but miss the mark in achieving desired results. Common challenges in way include:

- Selecting appropriately and correctly using the right system to develop and deliver reports.
- Manipulating data in order to display the best metrics to make better business decisions and understand the company’s current position.
- Implementing an inefficient accounting close process that does not allow for timely report delivery to stakeholders.
- Ensuring the integrity of the data.
- Adopting management reporting processes at the incorrect stakeholder levels throughout the organization.

**ESSENTIAL COMPONENTS TO MANAGEMENT REPORTING**

A successful management reporting process contains several key elements. Your programme should begin with an accurate healthy data and metrics to support core business strategies and initiatives to specific stakeholders. Data should support both the long- and short-term visions for the company, and should be trustworthy and from a reliable source. For example, failing to remove data for a discontinued product will negatively skew the remaining pool of data and your ultimate reporting information.

**Developing a Successful Management Reporting Programme**

As with any key process, executive buy-in and vision are required upfront, in order to effectively implement and change management reporting in an organization. After that has been attained, you can begin taking steps toward implementing an effective management reporting programme. These include:

**Discovery**: Identify and involve stakeholders early on, and effectively communicate the vision across the organization and to the appropriate stakeholders. Identify and access the data sources available to meet your specific data needs.

**Analysis**: Understand the level of effort involved in creating each report. Develop data definitions to ensure everyone interprets it the same way. Keep the data tight and prioritize your information, in order to keep from
overwhelming the data recipient, and understand what the data says, and further encourage quick decision-making abilities the recipient.

Report creation and delivery: Create the reports and determine the appropriate delivery method of the data. Reports should be concise and comprehensive, but not overwhelming. Pay close attention while formatting and reporting, considering the specific needs of your users.

**Implementation:** Develop each report separately, and establish a governance process and policies to ensure data health across the organization. Define access control requirements, detailing who should have rights to access information. Minimize work by leveraging implemented software to create repeatable processes and automate report jobs for predetermined times throughout the month.

**Access point:** Create a common place for users to access data, such as a Web portal or SharePoint site.

**Feedback:** Collect comments and suggestions from users to discover ways to continuously improve the data and process.

**In-house IT capabilities:** Ensure that in-house Information Technology (IT) personnel can manage necessary systems and issues if they arise.

### GENERAL PRINCIPLES OF REPORT PRESENTATION

In order to make a report which is trustworthy and easily understandable, certain general principles are to be followed while reporting. A good report will help the management in taking the expected action to improve the performance of the organization. The basic principles to be kept in mind while preparing and submitting the report are as follows:

1. The report should have a proper title to describe the subject matter reported. It should be in a good format and should have subheadings and paragraph divisions. The name of recipient of the report should be written on the top of report.
2. The report should relate to certain period, and the period of time should be indicated on the top of report.
3. The report should he factual.
4. The report should be brief and concise but clear.
5. The report should be prompt because information delayed is information denied.
6. A report should distinguish between controllable and non-controllable factors and should report them separately. It is because management can take suitable actions regarding controllable factors.
7. Appropriate remarks should be given in the report. It saves valuable time of the management and ensures prompt attention.
8. A report should be periodically reviewed.
9. The report must be correct within the permissible degree of inaccuracy. The margin of error allowed will depend upon the purpose for which the report is prepared.
10. The report should draw manager’s attention immediately to exceptional matters so that management by exception may be carried out effectively.
11. Visual reporting through graphs, charts and diagrams should be preferred to descriptive reports because visual reporting attracts the eye more quickly and leaves impression on the mind lasting.
12. While doing comparisons in the report, it should be ensured that the comparisons between the same matters.
13. Detailed analysis should be given for all the result so that there can be comparison between the actual and the budgeted.
14. The format of report should remain unchanged from period to period.
FORMS OF PRESENTATION OF INFORMATION

Information may be presented in the following forms:

1) **Verbal (or oral):** Group meetings, seminars, conferences, or interviews may be organized where employees from various levels can meet to discuss and exchange their ideas.

2) **Written:** This is the most usual form of reporting and here the information takes the form of a written report.

CLASSIFICATION OF REPORTS

Reports can be classified by their forms, contents and frequency as follows:

### Forms
- descriptive
- tabular
- graphical

### Contents
- production
- sales
- cost
- finance

### Frequency
- routine
- or irregular
- special

FORMS OF REPORTING

1. **DESCRIPTIVE REPORTING:** These types of reports are written out in a descriptive style. They usually do not take the help of tables and graphs. They may include tables and graphs in order to lay emphasis on some of the points discussed. The language used is very important in such reports. It should be simple and correct and may convey the idea of the reporter to the management. The report should have suitable heading and it should be suitably paragraphed. The main report should be summarized, so that its recipient is able to know the exceptional matters, and the recommendation of the report without going into details its.

2. **TABULAR REPORTS:** Such reports are presented in the form of comparative statements. This form of reporting is applied in case of periodical reports covering production, costs, sales and finance. These reports should use same standard form of statements or tables from period to period so that proper comparison may be made between the present and past performance.

3. **GRAPHIC PRESENTATION:** It is very important method of presenting information to the management. It is a pictorial and attracts the eye of the recipient more quickly and forcibly. Recently graphs and diagrams have become very popular because they make comparisons of fairly long periods within a short space. This method of presenting information can effectively depict production costs, fluctuations in inputs and outputs, position & movement of stocks, variances, components of cost of production.

FREQUENCY OF REPORTING

Routine reports are rendered at periodic intervals. The intervals at which routine reports are to be presented should be fixed for each report. Production reports should be rendered at shorter intervals because delayed reporting on production may lead to a continuing loss for a longer period. Thus, an effort should be made to take note of production losses as early as possible so that the corrective measures may be taken to eliminate the losses.
SPECIAL REPORTS
Special reports are to be presented after thoroughly investigation of the problem which requires to be scrutinized. The following matters may the covered by special reports before presenting them to the management:

1. The effect of idle capacity on the cost of production of different products.
2. Make or buy decision.
3. Whether to replace labour by machines or not.
4. Whether to explore the new market at a selling price which is below the cost of production.
5. Whether to continue the sale of the product at a very low rate during depression.
6. Cost reduction schemes.
7. The most suitable method of raising funds.
8. The most suitable method of investing surplus cash.
9. Whether to purchase on higher fixed assets.
10. Research and development expenditure problems.
11. The effect of labour disputes on production and consequently on the cost of production.
12. The effect of a high rate of labour turnover.
14. The effect of providing a particular facilities to workers.
15. Feasibility study for a project.
17. Report on important development in the industry.
19. Report on whether to operate a casting system or not.

LESSON ROUND UP
- Reports can be defined as means of communication, usually in the written form, of facts which should be brought to the attention of the various levels of management who can use them to take suitable action for proper control.
- In any organization, there are three distinct level of managements- first line managements, middle management and top management.
- A management reporting system is essentially a mechanism for monitoring the ‘mission’ of an organization in terms of objectives set out in formal plan evolved by the organization.
- Inefficient reporting processes that yield inaccurate and dated information normally cause more harm than good.
- Effective processes uncover material financial misstatements prior to circulating information with
investors and other stakeholders, and identify and address problem areas before they elevate to unmanageable organization.

- A good report will help the management in taking the expected action to improve the performance of the concern.
- Reports are classified into three types: Contents, Form, Frequency.
- There are three forms of reporting: Descriptive, Tabular & Graphic Presentation.
- Routine reports are rendered at periodic intervals.
- The intervals at which routine reports are to be presented should be fixed for each report.
- Special reports are to be presented after investigating the problem which requires to be scrutinized.

**SELF TEST QUESTIONS**

1. What is reporting? What are the essential requisites for a report to make it useful to management?

2. What do you understand by the term “reporting to the management”? Discuss briefly the matter that how you would deal with a matter while reporting to the Board of Directors?

3. “Reporting is an essential means for cost control.” Comment on this statement and state what types of reports you would consider necessary in regard to advertisement cost?

4. You are entrusted with the work of collection and arrangement of data for the presentation of results for management action. Outline and briefly explain the reporting structure in this organization.

5. “Reports should be as brief as consistent with clarity”. “Reports should be accurate and presented in time”. Discuss these statements considering the requirements of the recipients of the reports.

6. What is the need of Management Reporting in a company?

7. Explain the process of developing a successful management reporting programmes?
Lesson 18
Decision Making Tools

LESSON OUTLINE

- Introduction
- Marginal Costing Vs Absorption Costing
- Practical Applications of Marginal Costing
- Cost-Volume-Profit Analysis
- Break Even Analysis
- Transfer Pricing
- Transfer Pricing for Domestic Transactions
- Transfer Pricing for International Transactions
- Activity Based Costing
- Traditional Costing
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

- Meaning of Absorption Costing, Its Advantages and Limitations
- Direct Costing: leaning
- Marginal Cost and Marginal Costing Meaning
- Features of Marginal Costing
- Distinction between Direct Costing and Absorption Costing
- Distinction between Contribution and Profit
- Arguments For and Against Marginal Costing
- Distinction between Absorption Costing and Marginal Costing
- Absorption Costing and Marginal Costing: Impact on Profit
- Impact of inflation on Holding of Large Inventories
- Behavioural Considerations of Absorption Costing
- Practical Applications of Marginal Costing
INTRODUCTION

Direct Costing

- Direct costing is a method of costing in which the product is charged with only those costs which vary in volume. Variable or direct costs such as direct materials, direct labour and variable manufacturing expenses are examples of charged of costs the product.

- Under Direct Costing, a unit is assigned only the direct cost. All indirect costs are charged to Profit and loss account of the period in which they arise.

- Indirect are disregarded for inventory valuation as well. Indirect costs are those which cannot be directly identified with the cost objective.

- Costs which are a function of time rather than production or volume of activity are excluded from direct costs.

- The value of inventory is also ascertained on the basis of variable production costs and no part of fixed expenses, not even the fixed expenses incurred in the factory, is included in the inventory value.

- A direct cost is not necessarily the same as marginal cost, because usually marginal cost covers only those expenses which are of variable nature.

- Direct cost may also include cost which besides being fixed in nature are identified with cost objective.

MARGINAL COSTING

The term 'marginal cost' is defined as the amount at any given volume of output by which aggregate costs are changed, if the volume of output is increased or decreased even by one unit. It is a variable cost of one unit of a product or a service, i.e., a cost which could be avoided if that unit was not produced or provided.

Marginal costing is a principle whereby variable costs are charged to cost units and the fixed costs attributable to the relevant period is written off in full against the contribution for that period. Marginal costing is the ascertainment of marginal cost and the effect on profit because of changes in volume or type of output by differentiating between fixed costs and variable cost. In Marginal costing, costs are classified into fixed and variable costs. The concept of Marginal costing, is based on the behaviour of costs that vary with the volume of output. Marginal costing, is known as 'variable costing'in which only variable costs are accumulated and cost is ascertained only on the basis of variable costs.

Features of Marginal Costing

- All costs are categorized into fixed and variable costs. Variable cost per unit is same at any level of activity. Fixed costs remain constant in total regardless of changes in volume.

- Fixed costs are considered period costs and are not included in product cost, only variable costs are considered as product costs.

- Stock of work-in-progress and finished goods are valued at marginal cost of production.

- In Marginal costing products transferred from one process to another are valued at marginal costs only.

- Prices are determined with reference to marginal cost and contribution margin.

- Profitability of departments, products, etc., is determined with reference to their contribution margin.

- In accounting, marginal cost, the Overhead Control Account in the Cost Ledger represents only the variable overhead. Fixed costs are taken as expenses in the Profit and Loss Account and, thus excluded form costs.
• Presentation of data is oriented to highlight the total contribution and contribution from each product.
• The difference in the magnitude of the opening stock and closing stock does not affect the unit cost of production since all the product costs are variable costs.

Formulas Used in Marginal Costing
The formulas used in Marginal costing are as follows:

Sales = Variable cost + Fixed cost + Profit
Sales - Variable = Contribution
Sales – Variable cost = Fixed cost + Profit Contribution
Contribution = Fixed cost + Profit
Contribution – Fixed = Profit

Meaning of Contribution
In Marginal costing, costs are classified into fixed and variable costs. The contribution is the difference between the sales volume and the marginal cost of sales. In Marginal costing it is not possible to determine the profit per unit of product because fixed overheads are charged in total to the Profit and Loss Account rather than recovered in product costing. Contribution is a pool of amount from which total fixed costs will be deducted to arrive at the profit or loss.

Contribution and Profit: Distinction
The distinction between contribution and profit is given below:

<table>
<thead>
<tr>
<th>CONTRIBUTION</th>
<th>PROFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It includes fixed cost and profit.</td>
<td>1. It does not include fixed cost.</td>
</tr>
<tr>
<td>2. Marginal costing technique uses the concept of contribution.</td>
<td>2. Profit is the accounting concept to determine profit or loss of a business concern.</td>
</tr>
<tr>
<td>3. At break-even point, contribution equals to fixed cost.</td>
<td>3. Only the sales in excess of break-even point results in profit.</td>
</tr>
<tr>
<td>4. Contribution concept is used in managerial decision-making.</td>
<td>4. Profit is computed to determine the profitability of product and the concern.</td>
</tr>
</tbody>
</table>

ABSORPTION COSTING AND MARGINAL COSTING: DISTINCTION
The main points of difference between Absorption Costing and Marginal costing are as follows:

<table>
<thead>
<tr>
<th>ABSORPTION COSTING</th>
<th>MARGINAL COSTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total cost (both fixed and variable) is charged to the cost of products and inventory valuation.</td>
<td>1. Only variable cost is charged to products and inventory valuation.</td>
</tr>
<tr>
<td>2. Fixed cost is included in the cost of products.</td>
<td>2. Fixed cost is not included in the cost of products. It is transferred to Costing Profit and Loss Account.</td>
</tr>
<tr>
<td>3. Opening and closing stocks are valued at total cost which inducts both fixed and variable costs. Stock values in Absorption costing are, therefore, higher than in Marginal costing.</td>
<td>3. Stocks are valued only at variable costs. Stock values are lower in Marginal costing than in Absorption costing.</td>
</tr>
<tr>
<td>4. Profitability is measured by profit earned by various products or departments.</td>
<td>4. Profitability is judged by the contribution made by various products or departments.</td>
</tr>
</tbody>
</table>
5. Cost data is arrived on conventional pattern and hence is only the net profit for each product that is arrived at.

6. Valuation of opening and closing stock is affected due to the rupee costs.

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### Absorption Costing

- Both Variable and Fixed Cost Charged to Cost of Goods Produced
- Fixed Cost includes in the Cost Of Products
- Opening & Closing Stocks Valued at Total Cost

### Marginal Costing

- Only Variable Cost Charged to Cost of Goods Produced
- Fixed Cost Transferred to Costing Profit & Loss A/c
- Opening & Closing Stocks Valued at Variable Cost

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**Impact of Inflation on Holding of Large Inventories**

In an inflationary economy, prices rise rapidly. Holding large inventories will affect the inventory carrying cost including interest on funds blocked. There are other risks like obsolescence, deterioration in quality, limited shelf-life in case of certain materials, etc. In addition to these risks, cheaper substitutes may be available at a later date. New sources of supply may be available at a competitive rate or else price may fall. Hence, speculation should be avoided. The funds so blocked may be invested for expansion or diversification, which may result into higher profitability than the benefit arising from holding large inventory. Hence, normal level of inventory may be held to avoid stock-out leading to loss of production. In view of above points all inventory control techniques may be applied for deciding the amount to be invested in inventory. Inflationary economy is one factor, there are several other considerations for deciding the quantum of inventory.

**Behavioural Considerations in Absorption Costing**

Absorption costing is based on the progressive reapportionment of costs through cost centres until all non-production costs are identified with production centres where they can be absorbed into the cost of saleable products or services. To avoid behavioural problems in the operation of this system, there are three desirable features:
• Costs apportioned into a cost centre should be reported separately from those costs incurred by the manager of that cost centre. Only the latter category of costs is ‘controllable’ by him in the short-term, and it is only in relation to such costs that his performance should be judged.

• The amounts apportioned should, for control purposes, be at budgeted amounts. Any excess or saving compared with budget should be recognized as the responsibility of the manager of the department where the costs were incurred.

• At the time of setting budgets there should be a full discussion on cost apportionment proposals. This may give receiving cost centres an opportunity to challenge the level of service department costs, or at least it will ensure that every manager understands how and why the apportionment is made.

**PRACTICAL APPLICATIONS OF MARGINAL COSTING**

Marginal costing is a technique frequently used for short-term decision-making. The important applications of marginal costing as a tool for decision making are listed below:

a) Key or Limiting factor Analysis
b) Profit planning
c) Selection of profitable product mix
d) Make or buy decisions
e) Introduction of a new product
f) Discontinuance of a product or closure of a department
g) Accept or Reject special offer and sub-contracting
h) Planning of activity level
i) Market expansion
j) Temporary cessation of operations

**Key or Limiting Factor Analysis**

Marginal costing can also be used in budgeting to help the management to determine the profit-maximizing budget. Planning is necessary when one or more factors of production or other business resources are in short supply. Marginal costing rally shows its merit when scarce resources are being considered. Examples of resource restrictions which may apply are as follows:

- Limit to the availability of a particular grade of labour
- Shortage of raw materials
- Limit to machine capacity
- Shortage of cash to finance production (working capital)

When labour supply, materials availability, capacity of machine or cash availability limit production to less than the volume which could be actually achieved. Management is faced with the problem of deciding what to produce and what not to produce, because the resources are insufficient to make everything. The limiting factor is often sales demand itself, in which case the business should produce enough goods or services to meet the demand in full, provided that sales of the goods earning positive contribution towards fixed costs and profits.

**Profit Planning**

Profit planning is the main goal of any business firm. Profit planning thus becomes a vital starting point of all
managerial functions. Marginal costing technique is extensively used by the management in profit-planning. A profit target is fixed and management tries to achieve it by bringing changes in the factors affecting the profit. These factors are: (a) Selling price, (b) Quantity sold, (c) Variable cost per unit, (d) Total fixed costs, and (e) Sales-mix. With the help of marginal costing, the impact of the changes in above variables can easily be evaluated and desired profit can be achieved by the management. Profit figure is planned and activity level is determined to achieve that planned profit. It helps in doing sensitivity analysis by observing different costs and revenue situations, and their resultant impact on profit, and guides in the determining activity level to achieve the targeted profit.

**Selection of Profitable Product Mix**

In a multi-product concern, a problem is faced by the management as to which product mix or sales mix will give the maximum profit. The product mix which gives the maximum profit must be selected. Product mix is the ratio in which various products are produced and sold. The marginal costing technique helps the management in taking decisions regarding changing the ratio of product mix which gives maximum contribution or in dropping the unprofitable product line. The product which gives less contribution may be reduced or discontinued. A multi-product company takes weeks to choose its product mix. It analyzes and decides which combination of products would yield the largest total contribution.

**Make or Buy Decisions**

A manufacturing industry may make some products, parts or tools related to operation, or sometimes it may buy the same thing from outside. The management must decide which is more profitable to the firm making or buying. Such decisions are best taken with full knowledge of the marginal or variable cost of making rather than buying a product. But it is also helpful to know through Marginal costing what contribution to fixed costs will result from a ‘make’ decision. Sometimes, in manufacturing companies, a problem may arise as to whether the component, subassembly or product is to be manufactured within the organization or purchased from the market.

**Introduction of a New Product**

A manufacturing firm may add additional products with the available facility. The new product is sold in the market at a reasonable price, large quantities. It may become popular. If favourable, the sales can be increased but in thus the total cost comes down and contributes some amount towards fixed costs and profits. When a firm intends to introduce a new product into the market, the major consideration in taking such a decision is to see whether that particular product is able to recover at least its variable cost, and any contribution in excess of variable cost from it would improve the overall profitability of the firm. The important point to note is that all the present fixed costs of the firm are being met by the existing products.

**Discontinuance to a Product or Closure of a Department**

The marginal costing technique is used in taking decisions regarding discontinuance of a product. If any product’s performance is not impressive, such a product should be discontinued only if there is no contribution margin from that product. In other words.

Marginal costing technique shows the contribution of each product to fixed costs and profit. If a department or a product contributes the least amount, the department can be closed or its production can be discontinued. It means the product which gives a higher amount of contribution may be chosen and the rest should be discontinued.

The following points should be remembered while taking the above decisions:

(a) If a product/product line is dropped, there will be some disengaged capacity, which may be left unused or may be used to increase the production of products/product lines that are during profit.
(b) If any factor of production is key factor (i.e. available in restricted quantity or supply is short), then contribution should be expressed in terms of per unit of key factor.

It is also suggested that the following guiding principles should be followed in taking a decision to drop a product/product line or department.

(i) Product yielding highest contribution should be accorded top priority in production programme.

(ii) Non-product/product line should be dropped, if it does not yield any amount of positive contribution.

(iii) If any factor is key factor, that product/product line should be dropped as it provides least contribution per unit of key factors.

Accept or Reject Special Offer and Subcontracting

In times of taking decisions to accept or reject new orders in subcontracting, the organization has to analyze whether it is profitable to accept or reject the new order in subcontracting. The following problems demonstrate the use of the contribution technique.

Planning of Activity Level

A manufacturing company may have plans to expand or contract the level of activities depending upon the conditions prevailing in the market. Such planning is to be considered before the events overtake the business. Marginal costing is very useful for taking such decisions by enabling management to compare the contribution at different levels of activities.

Market Expansion

The schemes of sales promotion would aim at increasing the sales volume within the usual sales territories. Sales volume can also be increased by tapping new territories. This can be done either by extending its own marketing organization (such as opening a branch/depot/shop) or through local distributors. A sort of competition may also be there due to the attachment of customers of that area to some other brand, removal of which will involve higher selling and distribution costs. Marginal costing technique will be useful in providing relevant information in taking market expansion or contraction decisions.

Temporary Cessation of Operations

A factory or plant may have to cease its operations temporarily for sometime due to various reasons, like labour troubles, material shortage, financial difficulties, major breakdown and lack of orders. Shutdown costs are to be incurred in temporary closing of department/division/enterprise. In such cases closing as well as reopening cost must be considered. Shutdown costs may be sub-divided into three parts:

(a) Costs incurred on suspension of operations, e.g., cost of notifying customers about shutdown, cost of construction of shelters, sheds for protection of plant and machinery, cost of storage of material, retrenchment compensation and lay off costs payable to employees.

(b) Costs incurred during continued shutdown, e.g., cost of care and custody of plant and machinery, security measures for protection of assets and maintenance costs.

(c) Costs incurred in resuming operations after reopening e.g., cost of recruiting and training new workers, re-establishment of marketing contracts and time lag in picking up production.

The marginal costing technique will help the management in taking decisions to continue operations or shutdown plant temporarily for sometime. If the existing operations are able to earn at least some contribution to meet fixed costs during the period of shutdown, then the suggested course of action would be to continue operations.
even if there are losses as it would enable the organization to recover at least its part of fixed costs. In situation
where even variable costs are not covered then the operations may be suspended temporarily until there is
some improvement in business situation.

\[
\text{Shutdown point (Rs.)} = \frac{(\text{Fixed cost} - \text{Shutdown cost})}{\text{(Contribution p.u.)}} \times \text{Selling price p.u.}
\]

**COST-VOLUME-PROFIT ANALYSIS**

**What is Cost-Volume-Profit Analysis and its techniques?**

What is the Contribution Margin analysis?

What is Break-Even Analysis?

How to find out the Break-Even level?

What is Margin of Safety?

How CVP analysis can be used in taking different decisions?

**COST-VOLUME-PROFIT (CVP) ANALYSIS** is a technique that may be used by the management to evaluate
how costs and profits are affected by changes in the volume of business activities. Managers are quite often
faced with decisive situations involving sales level, sales mix, selling prices and the right combination of these
factors that will produce acceptable profits. As a result of change in operating conditions or change in economic
environmental factors, the value of and the relationship among these variables also change. A management
accountant may be of great help to answer the questions about the consequences of following particular courses
of action such as:

- What would the effect on profits be if the selling price is reduced/or more units are sold?
- What is the level of sales at which the firm will just break even and will not be earning any profits?
- What level of sales must be achieved to earn a desired level of profits?
- What sales level is required to meet additional fixed costs?
- What is the most profitable sales mix?
- What will be the effect of offering sales commission to a salesman out of the profit of the firm?

**Techniques of CVP Analysis**

The CVP analysis deals with the prices, costs structure and sales volume and identifies the profit figure with one
or other combination of these variables. The key elements in the CVP analysis are selling prices, sales volume,
variable cost per unit, total fixed costs and the sales mix (if the firm is dealing with more than one product at a
time). There are two basic techniques of CVP analysis. These are:

1. The Contribution Margin Analysis, and
2. The Break-Even Analysis.

The Break-Even Analysis can be taken up in two forms:

(i) Mathematical Approach,

(ii) Graphical Approach.

**Cost Behaviour and CVP Analysis**

The income statement prepared as per the variable costing (discussed in the previous chapter) provides the
information needed for the CVP analysis. Such income statement, it may be recalled, bifurcates costs on the basis
of cost behaviour into fixed and variable components. All variable costs are deducted from the sales revenue to find out the contribution margin from where the total fixed costs are deducted the net profit is calculated. The fixed costs are treated as period costs and consequently none if the fixed costs are inventoried. The distinction between fixed and variable costs provides the foundation for the development of linear relationship that can be used to estimate costs and profits at different sales volume. The cost behaviour information (i.e., fixed and variable cost elements) is used by managers to take decisions. Among important uses of cost behaviour information is CVP analysis which deals with the way the costs and profits change as the sales level changes.

### Contribution Margin Analysis

By definition, Contribution Margin (CM) is equal to the sales minus variable costs. This can be stated as:

**Contribution Margin = Sales – Variable Cost**

As the selling price per unit and the variable cost per unit are assumed to be constant, the CM per unit also remains constant. Say, the selling price is Rs.50 and the variable cost is 30. So, the CM will be Rs.20 per unit. Each unit sold by the firm generates a contribution of Rs.20, which is available to recover fixed costs and after they are covered, to contribute to the profit of the firm. This can also be expressed in the form of Contribution Margin Ration as follows:

\[
\text{CM Ratio} = \frac{(\text{Selling Price}-\text{Variable Cost})}{\text{Selling Price}} \times 100
\]

The CM Ratio is also known as Profit – Volume Ratio (PV ratio) or Contribution to Sales Ratio.

Suppose, in the above case, the firm is selling 1000 units and the fixed cost of operations is Rs.12,000. The Contribution Margin and the Net Profit will be:

\[
\text{CM} = \text{Sales} \times \text{CM Ratio} \\
= (1,000 \times 50) \times 40\% = Rs. 20,000
\]

\[
\text{Net Profit} = \text{CM-Fixed Cost} \\
= 20,000-12,000 = 8,000
\]

Now, if the sales increases by 100 units or Rs.5000, then the CM as well as NP both will increase by 40% of Rs.5000, i.e., Rs.2000. This can be verified as follows:

\[
\text{CM} = \text{Sales} \times \text{CM Ratio} \\
= 55,000 \times 40\% = Rs. 22,000
\]

\[
\text{Net Profit} = Rs.22,000–Rs.12,000 = Rs.10,000
\]

PV Ratio can also be expressed as:

\[
\text{PV Ratio} = \frac{(\text{Contribution per unit})}{\text{(S.P.per unit)}} \times 100
\]

Or,\[
\text{PV Ratio} = \frac{(\text{Total Sales}-\text{Total Variable Cost})}{\text{(Total Sales)}} \times 100
\]

Or,\[
\text{PV Ratio} = \frac{(\text{Change in Contribution})}{\text{(Change in Sales)}} \times 100
\]

Or,\[
\text{PV Ratio} = \frac{(\text{Fixed Cost})}{\text{(BE Sales)}} \times 100
\]
The CM is the difference between sales and the variable costs (VC), or

\[ CM = Sales - Variable\ Cost \]

Or, \[ VC = Sales - CM \]

**THE BREAK EVEN ANALYSIS**

The Break Even Analysis (BE Analysis) is the fundamental technique of CVP analysis. The CM per unit is available (i) for the recovery of the fixed cost, and (ii) to contribute towards the profit of the firm. Since the fixed costs remain constant over a given period, the firm must sell enough units to generate sufficient total CM, which is at least equal to the total fixed cost. The BE point is the sales level at which the contribution margin is just equal to the fixed cost, and the firm has no profit no loss. At the BE sales level, the total costs (fixed + variable) are just covered. Any sales level below the BE level will therefore result in loss, and sales level above the BE level will bring profit to the firm. Once the BE sales level has been achieved, the net profit will increase by the unit contribution amount for each unit sold.

BE sales level may be computed for a product or for group of products or for the entire firm. All the costs i.e., fixed or variable of the manufacturing and non-manufacturing operations must be incorporated in the calculation of BE level. It may be noted that the BE sales level is the minimum sales level, the firm must achieve to incur no loss, but in no case should it be taken to imply a desirable level. No firm in the long run can survive by operating at the BE sales only. The BE Analysis may be attempted in mathematical mode in the form BE equation or in graphical mode.

**Break-even Equation:** The BE Equation may be derived from the basic relationship between sales and profit as follows:

\[ Net\ Profit\ (NP) = Sales (S) - Variable\ Cost\ (VC) - Fixed\ Cost\ (F) \]

or, \[ S = VC + F + NP \] 

\[ \text{No. of Units Sold (U) x S.P.} = \text{(No. of Units Sold x V.C. per unit)} + F + NP \] 

\[ U \times SP = U \times VC + F + NP \]

The left hand side of the above equation consists of:

I. The number of units to be sold,

II. The selling price per unit, and

III. Total sales value obtained by multiplying the two above.

At the BE level, the profit is zero, and the above equation can written as:

\[ U \times SP = U \times VC + F \]

\[ U (SP) - U(VC) = F \]

\[ U (SP - VC) = F \]

\[ U = \frac{F}{(SP - VC)} \]

Thus the BE analysis can be applied by determining the value of one or more of these variables. If the selling price is known one can find out the number of units to be sold to break even. If the number of units expected to be sold are known one can use this equation to find out the minimum selling price to break even. Example illustrates the use of BF equation.
Illustration 1.

Rama Ltd. is selling at present, 8,000 units of a product at a selling price of Rs.20 per unit. The variable cost is Rs.10 per unit and the fixed costs are Rs.60,000 per annum. The firm can use the BE equation to answer the questions namely:

i. What is the BE sales level for the firm?

ii. How many units the firm must sell to earn a profit of Rs.40,000.

iii. What will be the profit if the fixed costs are reduced by Rs.10,000 and the variable costs are reduced by 10%.

iv. What selling price will give a profit of Rs.40,000 at the sales of 8,000 units.

v. How much extra sales must be made to meet the extra fixed cost of Rs.5,000.

Solution:

These questions may be attempted as follows:

(i) **BE Sales level:** At break even level, the NP is zero and the equation can be written as:

\[ U \times SP = U \times VC + F \]

\[ U \times Rs.20 = U \times 10 + Rs.60,000 \]

\[ 20U = 10U + 60,000 \]

\[ 10U = 60,000 \]

\[ U = 6,000 \]

The firm should sell 6,000 units (Rs.1,20,000) to break even.

(ii) **Desired Sales to earn profit of Rs.40,000:** The sales level can be derived as follows:

\[ 20U = 10U + 60,000 + 40,000 \]

\[ 10U = 1,00,000 \]

\[ U = 10,000 \]

So, sales of 10,000 units will give a profit of Rs.40,000.

(iii) **Profit level if Fixed cost and Variable costs change:**

\[ 8,000 \times 20 = (8,000 \times 9)+50,000 + NP \]

\[ NP = Rs.1,60,000-72,000-50,000 = Rs. 38,000 \]

(iv) **Desired Selling price to earn a Net Profit of Rs.40,000:**

\[ 8,000 \times SP = (8,000 \times 10)+60,000+40,000 \]

\[ 8,000 \times SP = 80,000 + 60,000+40,000 \]

\[ SP = Rs.22.50 \]

So, a selling price of Rs. 22.50 per unit will give a profit of Rs.40,000 at the sales of 8,000 units.

(v) **Extra Sales to meet additional Fixed costs of Rs.5000:**

\[ U \times Rs. 20 = U \times Rs. 10 + 60,000+5,000 \]
\[
20U = 10U + 65,000 \\
10U = 65,000 \\
U = 6,500
\]

So, additional sales of 500 units will make the firm meet additional fixed cost of Rs. 5,000. The BE sales level can be found by directly using the Contribution Margin as follows:

\[
\text{BE Sales} = \frac{(\text{Fixed Cost})}{(\text{CM per unit})} = \frac{(Rs. 60,000)}{(Rs. 20 - 10)} = 6,000 \text{ units}
\]

or \[
\text{BE Sales} = \frac{(\text{Fixed Cost})}{(\text{CM per unit})} = \frac{(Rs. 60,000)}{(50\%)} = Rs. 1,20,000
\]

**Margin of Safety**

A firm may be interested in evaluating and measuring the risk involved in operating at different volumes. An important measure of risk, known as Margin of Safety, is an integral part of the CVP analysis. The Margin of Safety is the difference between the Actual Sales (or the budgeted sales) and the BE Sales for a given period. So, the margin of safety indicates by how much decrease in the sales would make the incurs loses.

In case of Rama Ltd., the BE sales was 6,000 units. If the firm is operating at 6,000 units only, the margin of safety is zero and decline of even a single unit in sales volume will inflict a loss on the firm. If the firm expects a sales level of 8,000 units, then it has a margin of safety of 2,000 units (8,000-6,000). The Margin of Safety can be presented as a % of sales or as an amount as follows:

\[
\text{Margin of Safety} = \frac{\text{S.P} \times (\text{Actual Sales} - \text{BE Sales})}{\text{Expected Sales}} = \frac{\text{Rs. 20} \times (8000-6000)}{8000} = \text{Rs. 40,000}
\]

or \[
\text{Margin of Safety} = \frac{(\text{Expected Sales} - \text{BE Sales}) \times 100}{\text{(Expected Sales)}} = \frac{(8000 \times 20)-(6000 \times 20)}{(8000 \times 20)} \times 25\
= \frac{(1,60,000-1,20,000)}{1,60,000} \times 25\%
\]

A firm having large margin of safety is naturally less vulnerable to risk as compared to one that has low margin of safety. The general rule in this respect may be stated as follows: The greater the margin of safety, the lower the risk and vice versa.

It may be noted that the Margin of Safety depends too much on the cost pattern of the firm. Even if two firm have same sales level and same profit, the margin of safety may not be equal. This has been explained in the following. Example

**Illustration 2.**

There are two firm A Ltd. and B. Ltd. The sales and cost information for these two firms are given below:

<table>
<thead>
<tr>
<th></th>
<th>A Ltd.</th>
<th>B Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (Units)</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Selling Price (per unit)</td>
<td>Rs. 20</td>
<td>Rs. 20</td>
</tr>
<tr>
<td>Variable Cost (per unit)</td>
<td>Rs. 15</td>
<td>Rs. 10</td>
</tr>
<tr>
<td>Fixed Cost</td>
<td>Rs. 40,000</td>
<td>Rs. 90,000</td>
</tr>
</tbody>
</table>

Analyse the cost information.
Solution:

The profit position, BE sales and Margin of Safety may be presented as follows:

<table>
<thead>
<tr>
<th></th>
<th>A Ltd.</th>
<th>B Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (1000 × 20)</td>
<td>Rs. 2,00,000</td>
<td>Rs. 2,00,000</td>
</tr>
<tr>
<td>Variable Cost</td>
<td>1,50,000</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Contribution</td>
<td>50,000</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Fixed Cost</td>
<td>40,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Net profit</td>
<td>10,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>A Ltd.</th>
<th>B Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE Sales</td>
<td>Rs.1,60,000</td>
<td>Rs.1,80,000</td>
</tr>
<tr>
<td>Margin of Safety(Rs.)</td>
<td>40,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Margin of Safety (%)</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>

It is evident that Margin of Safety of A Ltd. (Rs. 40,000 or 20%) is double than that of B Ltd. (Rs. 20,000 or 10%) in spite of the fact that both have same sales (in volume as well as in rupees) and same profit level. The difference in margin of safety can be traced to the fact that the cost structures of two firms are entirely different. B Ltd. has higher fixed cost as compared to A Ltd. and the former would suffer losses more quickly than the latter in case of decrease in sales. If a firm has high risk level as indicated by low margin of safety, then the following steps may be taken to improve the position:

(i) Increasing the overall sales level.
(ii) Reduction in fixed cost or conversion of fixed cost into variable costs.
(iii) Reducing the BE level by increasing the contribution.

CVP Analysis and Target Net Profit: The CVP analysis can be done to determine the sales volume needed to earn a desired amount of profit. This desired profit can be expressed as a fixed absolute amount, or as a % of sales. Say, Rama Ltd. is interested in earning a minimum profit of 80,000 or minimum profit of 10% of sales. What level of sales must be achieved?

(i) Target Profit of Rs. 80,000: The basic BE equation is:

\[ S = VC + F + \text{Profit} \]

\[ S = 0.5S + Rs.60,000 + Rs.80,000 \]

\[ 0.5S = 1,40,000 \]

\[ S = 2,80,000 \]

This can also be found as follows:

\[ \text{Desired} = \frac{F + \text{Desired Profit}}{\text{C. M. Ratio}} \]

\[ = \frac{60,000 + 80,000}{50\%} = Rs. 2,80,000 \]

So, the sales of Rs.2,80,000 (or 14,000 units) will give a profit of 80,000.

(ii) 10% of Sales: If the firm wants to earn profit of 10% of sales, then it can be presented as follows:

\[ 0.1S = 0.5S + Rs.60,000 \]

\[ 0.4S = 60,000 \]

\[ S = 1,50,000 \]
Applications of CVP Analysis

The CVP analysis, as discussed so far, has many applications in decision-making. Once the CVP relationship of a firm is determined, the management can use this information in a number of decision-making situations. The CVP analysis can be used in the budgeting process where several alternative strategies regarding future performance are evaluated. Different applications of CVP analysis can be examined as follows:

The following information is available in respect of ABC Ltd.

<table>
<thead>
<tr>
<th>Current operating level</th>
<th>500 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price (per unit)</td>
<td>Rs.250</td>
</tr>
<tr>
<td>Variable Cost (per unit) (60%)</td>
<td>Rs.150</td>
</tr>
<tr>
<td>Contribution Margin (40%)</td>
<td>Rs.100</td>
</tr>
<tr>
<td>Fixed Cost</td>
<td>Rs.35,000</td>
</tr>
<tr>
<td>Current Sales (500 × 250)</td>
<td>Rs.1,25,000</td>
</tr>
</tbody>
</table>

Now, one or more of these variables may be changed to see the effect on profitability with the help of CVP analysis as follows:

(i) CHANGE IN VARIABLE COSTS AND SALES VOLUME: In many situations, a firm cannot increase its selling prices because of competitive environment. However, it may have opportunity of reducing the cost of production by using less expensive raw material, packing material etc. But this may result in less sales. This gives rise to a decision-making.

Suppose, ABC Ltd. has a proposal of utilizing a cheaper raw material which will reduce the variable cost to Rs.125 per unit. However, the use of cheaper raw material may result in decrease in sales by 10% (to 450 units only). Should the firm use cheaper raw material? This can be explained as follows:

| Present Contribution Margin | Rs.100 per unit |
| New Contribution Margin | Rs.125 per unit |
| Total Existing Contribution Margin (500 × 100) | Rs.50,000 |
| Total New Contribution Margin (450 ×125) | Rs.56,250 |
| Increase In Contribution Margin | Rs.6,250 |

As the Fixed cost is not expected to change, the profit of the firm would also increase by Rs.6,250. So, the cheaper raw material may be used. Moreover, the BE sales level which presently is 350 units (Rs. 35,000 ÷Rs. 100) will be reduced to 280 units (Rs. 35,000 ÷Rs. 125) only.

(ii) CHANGE IN FIXED COST AND SALES VOLUME: Quite often, the firm may have a proposal to increase the sales level by increasing fixed costs of advertisement, etc. This decision-making situation may be evaluated as follows:

Say, ABC Ltd. (refer to original data) has a proposal that sales can be increased to 600 units by incurring additional advertisements of 12,000. Should it be implemented?

| Existing Sales(500 × 250) | Rs. 1,25,000 |
| New Sales (600 × 250) | Rs. 1,50,000 |
| Increase in Sales | 25,000 |
The firm need not take up the advertisement because the net profit is expected to fall by Rs.2,000. In this case, the BE sales level will increase from 350 units to 470 units, i.e., \((35,000 + 12,000) \div 100\). This is self evident the fixed cost has increased from Rs. 35,000 to Rs. 47,000. Even if the existing sales figure (Rs.1,25,000) is not known, the incremental sales, i.e., Rs.250 × (600 - 500) Rs. 25,000 can be taken up to proceed in the similar way. This incremental analysis is simple but concentrates on the variables involved only.

(iii) **CHANGE IN FIXED COST, VARIABLE COSTS AND SALES VOLUME**:

The management may face a situation which involves a trade off between a fixed cost and a variable cost. The CVP analysis may be used in such situation as follows: Say ABC Ltd. (refer to original data) has a proposal that sales staff may be paid a commission of 10% of sales instead of fixed salaries totalling Rs.8,000. Should the change in staff remuneration be introduced given that sales will increase by 10%? It may be noted that this situation involves a simultaneous change in 3 variables. This can be analyzed as follows:

| New Variable Cost per unit (Rs. 150+10% of Rs. 250) | Rs.175 |
| New Fixed Cost | Rs.27,000 |
| New Contribution margin (Rs.250-175) | Rs.75 |
| Increase in Sales (10%) | 50 units |
| Total Contribution (New) (550 × 75) | Rs.41,250 |
| Existing Contribution (500 ×100) | 50,000 |
| Decrease in Contribution | 8,750 |
| Less : Decrease in Fixed Cost | 8,000 |
| Net Decrease in Profit | 750 |

The net profit of the firm is expected to decrease by Rs.750. So, the proposed scheme need not be adopted. Further, the BE level will also marginally increase from 350 units to 360 units (i.e., \(27,000 \div 75\)).

(iv) **Change in Selling Price, Fixed Cost and Sales Volume**: A firm may have an opportunity to sell more units provided the selling price is reduced marginally and a renewed advertisement campaign is undertaken. The CVP analysis may be used in such situations as explained below:

Say, ABC Ltd. (refer to original data) has a proposal that its sales can be increased by 40% if (i) it reduces its selling price by 10% and (ii) it undertakes advertisement of Rs.15,000. Should it adopt the scheme?

| New Selling price (Rs.250-10% of 250) | Rs.225 |
| New Contribution Margin (Rs.225-150) | 75 |
| New fixed Cost (Rs.35,000 +15,000) | Rs.50,000 |
| New Sales Level (500 + 40% of 500) | 700 units |
| Total new Contribution (700 × Rs.75) | Rs. 52,500 |
| Total Existing Contribution (500 X 100) | 50,000 |
| Increase in Contribution | 2,500 |
| Less : Increase in Fixed Cost | 15,000 |
| Decrease in Net Profit | 12,500 |

The net profit, after new scheme, would be reduced by Rs. 12,500. So, the firm need not adopt the new scheme. New BE sales level would be 666 units, i.e., \((50,000 \div 75)\).
(v) **Special Pricing situation:** In certain cases, the management may face a situation where a bulk order may be procured provided the selling price is quoted reasonably low. Assuming that the firm is operating at a level higher than BE level and the total fixed costs are already covered, the price may be quoted as low as the variable cost. But the firm must make some profit from bulk order also otherwise why to take so much of trouble?

Say, ABC Ltd. (refer to original data) has sufficient idle capacity. It has received an enquiry for the supply of 300 units (packed in better box at an additional cost of Rs.20 per box). The company may not entertain the enquiry unless it is expected to give a profit of Rs.6,000. What minimum price should it quote?

As the existing fixed costs are already fully covered, the firm can quote a price which will ensure the recovery of total variable costs as well as the desired profit. This can be found as follows:

<table>
<thead>
<tr>
<th>Variable Cost (per unit)</th>
<th>Rs. 150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional variable Cost</td>
<td>20</td>
</tr>
<tr>
<td>Desired Profit (6000 +300)</td>
<td>20</td>
</tr>
<tr>
<td><strong>Price to be quoted</strong></td>
<td>Rs.190</td>
</tr>
</tbody>
</table>

Now, suppose that the production of additional 300 units will result in the increase of fixed cost by Rs.3000. The firm should quote a price which will ensure the recovery of this cost (Rs.10 per unit) also, so, the minimum price to be quoted is Rs.200 (190 +10).

**Income Determination under Marginal Costing and Absorption Costing**

The net profit under the two systems may be same or different. Difference in profit may be because of the different basis of inventory valuation. In marginal costing stocks of work-in-progress and finished goods are valued at variable cost whereas in absorption costing stocks are valued at total cost;

Income statement under the two systems may be prepared in the formats given below:

**Format of Income Statement (Absorption Costing)**

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>xxxx</td>
</tr>
<tr>
<td><strong>Production Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Direct material consumed</td>
<td>xxxx</td>
</tr>
<tr>
<td>Direct labour cost</td>
<td>xxxx</td>
</tr>
<tr>
<td>Variable manufacturing overheads</td>
<td>xxxx</td>
</tr>
<tr>
<td>Fixed manufacturing overheads</td>
<td>xxxx</td>
</tr>
<tr>
<td>Costs of goods produced</td>
<td>xxxx</td>
</tr>
<tr>
<td>Add : Opening stock of finished goods</td>
<td>xxxx</td>
</tr>
<tr>
<td>(valued at cost of previous period’s production)</td>
<td></td>
</tr>
<tr>
<td><strong>Cost of goods available for sale</strong></td>
<td></td>
</tr>
<tr>
<td>Add : (or less) Under (or over) absorption of fixed manufacturing overheads</td>
<td>xxxx</td>
</tr>
<tr>
<td>Add : Administration costs</td>
<td>xxxx</td>
</tr>
<tr>
<td>Selling and distribution costs</td>
<td>xxxx</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td>xxxx</td>
</tr>
<tr>
<td><strong>Profit</strong> (Sales – Total cost)</td>
<td>xxxx</td>
</tr>
</tbody>
</table>

**Illustration 3.** Zen Ltd. supplies you the following data:
Prepare an income statement under absorption costing.

Solution:

Income Statement (Absorption Costing)

\[
\begin{align*}
(A) & \quad \text{Rs.} \\
\text{Sales} & \quad 1,25,000 \\
\text{Direct materials} & \quad 48,000 \\
\text{Direct wages} & \quad 22,000 \\
\text{Factory overheads} & \\
\quad \text{Variable} & \quad 13,000 \\
\quad \text{Fixed} & \quad 20,000 \\
(B) \text{ Cost of Production} & \quad 1,03,000 \\
\text{Adm. and selling overheads} & \\
\quad \text{Variable} & \quad 2,000 \\
\quad \text{Fixed} & \quad 8,000 \\
(C) \text{ Total Cost} & \quad 10,000 \\
\text{Profit} (A-B) & \quad 12,000 \\
\end{align*}
\]

Format of Income Statement (Marginal Costing)

\[
\begin{align*}
\text{Sales} & \quad xxxxx \\
\text{Variable Manufacturing costs} & \quad xxxxx \\
\quad \text{Direct material consumed} & \quad xxxxx \\
\quad \text{Direct labour} & \quad xxxxx \\
\quad \text{Variable manufacturing overheads} & \quad xxxxx \\
\text{Cost of goods produced} & \quad xxxxx \\
\text{Add} : \quad \text{Opening stock of finished goods} & \quad xxxxx \\
\quad \text{(valued at variable cost of previous period)} & \quad xxxxx \\
\text{Less} : \quad \text{Closing stock of finished goods (valued at current variable cost)} & \quad xxxxx
\end{align*}
\]
Illustration 4. From the data given in illustration 17.1, prepare an income statement under marginal costing.

Solution:

Income Statement (Marginal Costing)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,25,000</td>
</tr>
<tr>
<td>Valuable Cost</td>
<td></td>
</tr>
<tr>
<td>Direct materials (A)</td>
<td>48000</td>
</tr>
<tr>
<td>Direct wages (A)</td>
<td>22000</td>
</tr>
<tr>
<td>Variable overheads (A)</td>
<td></td>
</tr>
<tr>
<td>– Factory (B)</td>
<td>13000</td>
</tr>
<tr>
<td>– Adm. and selling (B)</td>
<td>2000</td>
</tr>
<tr>
<td>Contribution (A-B) (C)</td>
<td>40,000</td>
</tr>
<tr>
<td>Fixed overheads (D)</td>
<td></td>
</tr>
<tr>
<td>– Factory (D)</td>
<td>20,000</td>
</tr>
<tr>
<td>– Adm. and selling (D)</td>
<td>8,000</td>
</tr>
<tr>
<td>Profit (C-D)</td>
<td>2,8000</td>
</tr>
</tbody>
</table>

Limiting or Key Factor

The objective of a business is to earn maximum profit. However, it is not always easy to achieve this objective because profit-earning is affected by a variety of factors. For example: An undertaking may have sufficient orders on hand, ample skilled labour and production capacity, but may be unable to obtain all the quantity of material it needs for the manufacture of maximum quantities which could be. Thus, material is the factor which limits the size of output and prevents an undertaking from maximizing its profit. Similarly, sometimes a business is not able to sell all that it can produce. In such a case, sales in the limiting factor.

A limiting or key factor may thus be defined as the factor in the activities of an undertaking which at a particular point in time or over a period limit the volume of output. Examples of limiting factors are:

1. Sales
2. Labour of particular skill
3. Financial resources
4. Materials
5. Production capacity or machine hours
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The purpose of the limiting factor technique is to indicate the most profitable course of action in all such cases where alternatives are possible.

**Contribution per unit of key factor** – In case a key factor is operating, the most profitable position is reached when contribution per unit of key factor is maximum. For instance, if a choice lies between producing the product A which yields a contribution of Rs.15 per unit and product B which yields a contribution of Rs.20 per unit, product B would be more profitable.

If however, product A takes 3 kg of material which is a limiting factor) and product B takes 5kg the respective contributions per kg of material would be :

\[
\text{Product A} = \frac{\text{Rs.15}}{3\text{kgs}} = \text{Rs.5} \\
\text{Product B} = \frac{\text{Rs.20}}{5\text{kgs}} = \text{Rs.4}
\]

Product A, which gives the greater contribution in terms of per unit of limiting factor will be more profitable.

**Illustration 5.** The following data is given:

<table>
<thead>
<tr>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>Rs. 24</td>
</tr>
<tr>
<td>Direct labour @ Rs.3 per hour</td>
<td>Rs. 6</td>
</tr>
<tr>
<td>Variable overhead @ Rs.4 per hour</td>
<td>Rs. 8</td>
</tr>
<tr>
<td>Selling price</td>
<td>Rs. 100</td>
</tr>
<tr>
<td>Standard time</td>
<td>Rs. 2hrs</td>
</tr>
</tbody>
</table>

State which product you would recommend to manufacture when :

(a) Labour time is the key factor
(b) Sales value is the key factor

**Solution :**

<table>
<thead>
<tr>
<th>Product A</th>
<th>Product B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price (S)</td>
<td>Rs. 100</td>
</tr>
<tr>
<td>Direct material</td>
<td>Rs. 24</td>
</tr>
<tr>
<td>Direct labour</td>
<td>Rs. 6</td>
</tr>
<tr>
<td>Variable overhead</td>
<td>Rs. 8</td>
</tr>
<tr>
<td>Variable cost (V)</td>
<td>Rs. 38</td>
</tr>
<tr>
<td>Contribution (S-V)</td>
<td>Rs.62</td>
</tr>
</tbody>
</table>

(a) Contribution per labour hour: Rs.62 ÷ 2 hrs = Rs.31 \\
(b) Contribution per rupee of sales value: Rs.62 ÷ 100 = Rs.0.62 \\

**Conclusion :**

(a) Product A is recommended when labour time is the key factor because contribution per labour hour of product A is more than that of product B.
(b) When sales value is the key factor, product B is recommended because contribution per rupee of sales value of product B is more than that of product A.

(c) When sale quantity is the key factor, product B is more profitable because its contribution per unit is higher than that of the product A.

**Illustration 6. (Income Statement – Marginal vs. Absorption Costing)**

The following cost data is available from the records of M/s ZP Ltd., with regard to their product ‘Milenium’

<table>
<thead>
<tr>
<th>Selling price per unit</th>
<th>Rs.60.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable cost per unit</td>
<td>Rs.36.00</td>
</tr>
<tr>
<td>Fixed cost per unit</td>
<td>Rs.12.00</td>
</tr>
<tr>
<td>Normal output</td>
<td>1,00,000 units</td>
</tr>
</tbody>
</table>

Other additional data available for four consecutive periods are as under:

<table>
<thead>
<tr>
<th></th>
<th>Period I</th>
<th>Period II</th>
<th>Period III</th>
<th>Period IV</th>
<th>Total units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock</td>
<td>–</td>
<td>–</td>
<td>30,000</td>
<td>20,000</td>
<td>–</td>
</tr>
<tr>
<td>Production</td>
<td>1,00,000</td>
<td>1,20,000</td>
<td>1,10,000</td>
<td>90,000</td>
<td>4,20,000</td>
</tr>
<tr>
<td>Sales</td>
<td>1,00,000</td>
<td>90,000</td>
<td>1,20,000</td>
<td>1,10,000</td>
<td>4,20,000</td>
</tr>
<tr>
<td>Closing stock</td>
<td>–</td>
<td>30,000</td>
<td>20,000</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

You are required to prepare a statement showing profit for different periods, under both marginal costing and absorption costing methods, showing under/over absorption of overheads, if any, and also given your comments.

**Solution:**

**Income Statement (Marginal Costing)**

<table>
<thead>
<tr>
<th></th>
<th>I Rs.</th>
<th>II Rs.</th>
<th>III Rs.</th>
<th>IV Rs.</th>
<th>Total Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales @ Rs. 60 p.u. (A)</td>
<td>60,00,000</td>
<td>54,00,000</td>
<td>72,00,000</td>
<td>66,00,000</td>
<td>2,52,00,000</td>
</tr>
<tr>
<td></td>
<td>(100000 x 60)</td>
<td>(90000 x 60)</td>
<td>(120000 x 60)</td>
<td>(110000 x 60)</td>
<td>(420000 x 60)</td>
</tr>
<tr>
<td>Opening stock @ Rs.36</td>
<td>--</td>
<td>--</td>
<td>10,80,000</td>
<td>7,20,000</td>
<td>--</td>
</tr>
<tr>
<td>Production cost @ Rs.36</td>
<td>36,00,000</td>
<td>43,20,000</td>
<td>39,60,000</td>
<td>32,40,000</td>
<td>1,51,20,000</td>
</tr>
<tr>
<td>Total</td>
<td>36,00,000</td>
<td>43,20,000</td>
<td>50,40,000</td>
<td>39,60,000</td>
<td>1,51,20,000</td>
</tr>
<tr>
<td>Less : Closing stock</td>
<td>--</td>
<td>10,80,000</td>
<td>7,20,000</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Cost of Goods sold (B)</td>
<td>36,00,000</td>
<td>32,40,000</td>
<td>43,20,000</td>
<td>39,60,000</td>
<td>1,51,20,000</td>
</tr>
<tr>
<td>Contribution (A-B)</td>
<td>24,00,000</td>
<td>21,60,000</td>
<td>28,80,000</td>
<td>26,40,000</td>
<td>1,00,80,000</td>
</tr>
<tr>
<td>Less : Fixed cost</td>
<td>12,00,000</td>
<td>12,00,000</td>
<td>12,00,000</td>
<td>12,00,000</td>
<td>48,00,000</td>
</tr>
<tr>
<td>Profit</td>
<td>12,00,000</td>
<td>9,60,000</td>
<td>16,80,000</td>
<td>14,40,000</td>
<td>52,80,000</td>
</tr>
</tbody>
</table>
Income Statement (Absorption Costing)

<table>
<thead>
<tr>
<th></th>
<th>I Rs.</th>
<th>II Rs.</th>
<th>III Rs.</th>
<th>IV Rs.</th>
<th>Total Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (A)</td>
<td>60,00,000</td>
<td>54,00,000</td>
<td>72,00,000</td>
<td>60,00,000</td>
<td>2,52,00,000</td>
</tr>
<tr>
<td>Opening stock @ Rs.48</td>
<td>--</td>
<td>--</td>
<td>14,40,000</td>
<td>9,60,000</td>
<td>--</td>
</tr>
<tr>
<td>Production @ Rs.48</td>
<td>48,00,000</td>
<td>57,60,000</td>
<td>67,20,000</td>
<td>52,80,000</td>
<td>2,01,60,000</td>
</tr>
<tr>
<td>Less Over absorbed over head</td>
<td>---</td>
<td>14,40,000</td>
<td>9,60,000</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Less Over absorbed over head</td>
<td>48,00,000</td>
<td>43,20,000</td>
<td>57,60,000</td>
<td>52,80,000</td>
<td>2,01,60,000</td>
</tr>
<tr>
<td>Add : Under absorbed over head</td>
<td>--</td>
<td>2,40,000</td>
<td>1,20,000</td>
<td>---</td>
<td>3,60,000</td>
</tr>
<tr>
<td>Cost of sales (B)</td>
<td>48,00,000</td>
<td>40,80,000</td>
<td>56,40,000</td>
<td>52,80,000</td>
<td>1,98,00,000</td>
</tr>
<tr>
<td>Profit (A-B)</td>
<td>12,00,000</td>
<td>13,20,000</td>
<td>15,60,000</td>
<td>12,00,000</td>
<td>52,80,000</td>
</tr>
</tbody>
</table>

Comments

**Period I** – There is no opening or closing stock. Thus profit is the same under marginal costing and absorption costing.

**Period II** – Profit under absorption costing is higher because closing stock is more than the opening stock.

**Period III** – Profit under marginal costing is higher because opening stock is more than closing stock.

**Period IV** – Profit is higher in marginal costing because opening stock is more than closing stock.

**Overall** – For the full year (overall) profits under the two systems equal because there is no opening or closing stock.

**Illustration 7.** From the following data calculate the break-even point

- Direct material per unit: Rs.3
- Direct labour per unit: Rs.2
- Fixed overhead (total): Rs.10,000
- Variable overhead: 100% on direct labour
- Selling price per unit: Rs.10
- Trade discount: 5%

Also determine the net profits, if sales are 10% above the break-even point.

**Solution :**

**Marginal Cost Statement**

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net selling price (Rs.10-5% discount)</td>
<td>9.50</td>
</tr>
<tr>
<td>Direct material</td>
<td>3.00</td>
</tr>
</tbody>
</table>
### Direct Labour and Overheads

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct labour</td>
<td>2.00</td>
</tr>
<tr>
<td>Variable overheads</td>
<td>2.00</td>
</tr>
<tr>
<td>Variable cost</td>
<td>7.00</td>
</tr>
<tr>
<td>Contribution (Rs.9.50-7.00)</td>
<td>2.50</td>
</tr>
</tbody>
</table>

#### Break-even Point

\[
B.E. \text{ point} = \frac{F}{C} = \frac{10,000}{2.50} = 4,000 \text{ units}
\]

#### B.E. Point and Sales

- **B.E. Point (in Rs.)** = 4,000 units @ Rs.10 = 40,000
- **Less : 5% discount** = 2,000
- **Net sales value of B.E. Point** = 38,000

#### Profit

When sales are 10% above B.E. point

\[
\text{Sales} = 4,000 + 10\% = 4,400 \text{ units}
\]

- **Contribution (4,400 units x Rs.2.50)** = 11,000
- **Less : Fixed cost** = 10,000
- **Profit** = 1,000

---

## Transfer Pricing

When responsibility accounting concept took roots in performance appraisal and the heads of divisions felt that their performance should be evaluated on a level playing ground, the concept of cost centres gave way to profit centres. Each division became a profit centre on its own, taking into consideration the credit for the performance, in terms of a return, to be added on to cost, before they transferred their product for further conversion in the subsequent division.

The quantum of return to be added to the cost of the product or product component or intermediate product produced by the division became a very interesting but complicated exercise. This exercise took the form of transfer pricing (TP), which has grown significantly in stature for the last two decades.

Normally, a transaction between two companies, when they are not related, becomes a sale. When they are related or under common control, however, these transactions are covered under TP. Transfer price represents the value or price at which transactions take place between related parties. Again, transfer price is a price at which a company transfers physical goods and intangible property, as also provides services to associated companies. With globalization, almost 60 per cent of the companies have their own associates or subsidiaries, and, as such, these transactions are covered by TP, especially to minimize tax incidence.

### International Scenario on TP

During the last decades, the concept of TP has assumed greater importance and many countries have evolved guidelines with regard to TP. In 1995, USA and Australia evolved certain guidelines, followed by France, Mexico, Brazil, Canada, and Korea in 1998.

In 2001, six more countries - the UK, Denmark, Germany, Poland, Belgium, and India followed suit. Internationally, OECD has formulated guidelines on TP and they serve as generally accepted practices by tax authorities. These guidelines emphasize the commitment of the arm’s length principle throughout a wide range of countries.

### Factors Influencing TP

The major external factors are as follows:

- **Accounting standards (AS)**- 18
• Income tax in India
• Cost accounting record rules (CARR)
• Excise duty in India

**Accounting Standard 18**

This accounting standard requires disclosure of ‘any elements of the related party, transactions, necessary for an understanding of the financial statements. The transactions that come under the purview of AS 18 are:

a) Purchase and sale of goods
b) Rendering or receiving services
c) Agency arrangements
d) Leasing arrangements
e) Transfer of research and development
f) License agreements
g) Finance
h) Guarantees and collaterals
i) Management contracts

**Income Tax in India**

The Finance Act 2001 introduced the detailed TP rule with effect from 01 April 2001. The rules have laid emphasis on arm’s length price (ALP) and have become the focal point for ‘related party’ transactions. The term related party refers to a party that directly or indirectly, through one or more intermediaries, controls or is controlled by/or is under common control with an enterprise. In short, the following specific situations can arise as follows:

Company A is considered as an affiliate of another company B, if

• A either directly or through intermediaries controls B.
• B either directly or through intermediaries controls A.
• Both A and B are under the control of another Company C.

Again, the term control has been defined in IAS 24 under ‘related party’ disclosures, as

• Either enjoyment of more than one half of the voting power or substantial power directly or indirectly through subsidiaries
• Power to direct the operating and financial policies of management by statute or agreement.

Examples of domestic and multinational transfer pricing methods.

**Domestic transfer pricing methods**

<table>
<thead>
<tr>
<th>Methods</th>
<th>USA</th>
<th>Australia</th>
<th>Canada</th>
<th>Japan</th>
<th>India</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market-price based Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>based</td>
<td>30%</td>
<td>13%</td>
<td>34%</td>
<td>34%</td>
<td>47%</td>
<td>41%</td>
</tr>
<tr>
<td>Variable cost</td>
<td>4</td>
<td>N.D.</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Absorption or full cost</td>
<td>45</td>
<td>N.D.</td>
<td>37</td>
<td>44</td>
<td>47</td>
<td>19</td>
</tr>
<tr>
<td>Clear</td>
<td>1</td>
<td>N.D.</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>50%</td>
<td>65%</td>
<td>46%</td>
<td>46%</td>
<td>53%</td>
<td>29%</td>
</tr>
</tbody>
</table>
The guidelines on TP issued by the government of India, under section 92 of the Income Tax Act 1961, vide notification dated 21 August 2001, has laid down the objectives of the transfer pricing guideline and the impact thereof on corporate governance.

Cost Accounting Record Rules and Transfer Pricing

Related party relationship under the CARR is the same as prescribed under AS18. A comparison of transactions between CARR and AS 18 is given in the Table. This is useful for management accountants to know.

**TABLE CARR VS AS 18**

**CARR – PROVISION AS PER AMENDMENT DATED 28 SEPTEMBER 2001**

- Related party transactions covered under the rules are supplies made or services rendered in respect of:
  - Purchase and sale of raw materials, finished products, process materials, chemicals, and rejected goods, including scraps, and so on;
  - Utilization of plant facilities and technical know-how;
  - Supply of utilities and any other services;
  - Administrative, technical, managerial, or any other consultancy services;
  - Purchase and sale of capital goods, including plant and machinery;
  - Any other payment, related to production, processing, or manufacturing or products under reference;

**AS 18 – RELATED PARTY DISCLOSURE**

- Example of related party transaction as per para 24 and 25.
  - Purchase or sale of goods (finished or unfinished);
  - License agreements;
  - Rendering or receiving of services;
  - Management contracts, including the deputation of employees;
  - Purchases or sales of fixed assets;
  - Agency arrangement;
  - Leasing or hire purchase arrangements (h) Transfer of research and development (0 Guarantees and collaterals;
  - Finance (including loans and equity contribution in cash or kind);
  - Any other elements of the related party transactions necessary for an understanding of the financial statement;
The term 'significant influence' is considered as authority to participate in developing company policies. Normally this is done through representation in the Board of Directors. Exchange of managerial personnel and material, intercompany transactions, transfer of technical knowledge, and so on, are also other types of intercompany transactions. The primary focus of CARR is the disclosure of essential information relating to transactions between related parties. The purpose of such a disclosure is to determine the rationality in the pricing of transactions taking place between the related parties. CARR has also prescribed the manner in which the basic records should be kept to provide transparency in the transactions.

Determination of the reasonability of rates charged is on the basis of arm’s length price. The guidelines laid down in regard to arm’s length price are as follows:

1. Agreement regarding prices and profits derived, along with split in income between the parties;
2. Comparable circumstances should be identified, if possible;
3. Negotiations in regard to TP between the parties;

Application of Arm’s length price, however, has its own problems in different situations. These could be as follows:

a) In a monopolistic situation, normal price does not exist and, as such, abnormal profits are likely to arise.

b) Valuation of intangibles does not lend itself for straightforward measurement. A good deal of judgement would be required for this valuation and it may face practical difficulties.

c) When there are multinational corporations, which exhibit particular horizontal combinations, technology available in the related party transactions may be dominant, and as such, third-party prices may not exist.

**TRANSFER PRICING FOR DOMESTIC TRANSACTIONS**

Under CARR, transfer pricing methods for domestic transactions have been prescribed as follows:

- **Full product cost**: Total cost including prime cost, depreciation, production, and administrative overheads, research and development costs, selling and distribution costs, interest on working capital, and so on, are computed. Thus, the full product cost represents both unit fixed cost and unit variable cost in the cost base. Transfer at full product cost, however, does not include an element of profit, and as such, it is likely that the transferee is benefited to that extent in comparison to market price. So, this method is applied more for intracompany transactions.

- **Marginal cost or variable cost**: This represents the minimum cost applied for any particular transfer. This is normally resorted to when the transferee is very weak and is not in a state to take on the additional burden of the total cost. Therefore, under this method, profitability for the transferor is affected to a great extent. So, application of this method is limited to situations when the transferee has to be supported in a difficult situation, and it is also applied for intracompany transactions.

- **Cost plus method**: In this method, determination of cost is paramount. An appropriate mark-up over the cost determines the appropriate profit. The resultant price is the arm’s length price. The total cost of production increased by a percentage of profit as a mark-up is applied for transfer. The mark-up is based on negotiations between the transferor and the transferee and it is normally based on unrelated third-party transactions. Application of cost plus method is when external market exists. Again, this method is applied when the transfer involves addition of value through manufacturing processes or other services between related parties.

- **Market price**: The concept of opportunity cost comes into play in the adoption of this method. The
transferee accepts the products at a price which he would have paid had he purchased in the open market. Thus, the transferor, while getting a fair price, does not pass on his efficiency or inefficiency to the transferee. This method is widely used as long as a normal price exists in the open market in unrelated transactions.

- **Negotiated price**: Negotiations happen between the transferor and the transferee to arrive at mutually accept terms. Normally, the transferee initiates the negotiation on the basis of a quotation received from the transferee as well as from external sources. This method is adopted when a competitive external market exists. However, it is tedious and is resorted to when quality and reliability of supply become the major factors.

Table gives a summary of the transfer-pricing methods

**TABLE TRANSFER PRICING METHODS SUMMARY (DOMESTIC TRANSACTIONS):**

<table>
<thead>
<tr>
<th>Method</th>
<th>Applicability</th>
<th>Brief Description of Method</th>
<th>Issue Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full cost</td>
<td>Intra– or inter – company transaction</td>
<td>Absorption costing—Both variable and fixed costs are absorbed</td>
<td>Fixed cost to be charged on normal capacity</td>
</tr>
<tr>
<td>Marginal cost</td>
<td>Intra– or inter – company transaction</td>
<td>Marginal costing technique. only variable costs are included</td>
<td>No fixed cost component is included, transaction is unduly gainer</td>
</tr>
<tr>
<td>Cost plus</td>
<td>Value addition manufacturing</td>
<td>Total cost plus appropriate margin transactions) Issues involved</td>
<td>Allocation of overhead on the basis of normal capacity; identification of comparables and comparing the mark-up</td>
</tr>
<tr>
<td>Market price</td>
<td>Where market price of similar price is available</td>
<td>Market price of similar product</td>
<td>Market price includes selling/distribution, sales promotion expenses, commission, and so on</td>
</tr>
<tr>
<td>Negotiated price</td>
<td>Where the competitive market for the product is absent</td>
<td>Negotiated price between transferor and transferee</td>
<td></td>
</tr>
</tbody>
</table>

**TRANSFER-PRICING FOR INTERNATIONAL TRANSACTIONS**

For international transactions, the principle of arm’s length price is an absolute necessity and is computed under the following methods. It is computed under four different methods as follows:

**Comparable Uncontrolled Price (CUP) Method**

This method compares the transfer price in a controlled transaction, with the price charged in a comparable uncontrolled transaction. Thus, this method is direct and reliable to apply the arm’s length principle. The price paid between independent parties evolves the basis for the determination of the arm’s length price under this method. The precondition for application of CUP is the necessity of similarity between products in the market. This method is applied in the following manner:

- **Step 1** Price paid for a similar product or the same product in an uncontrolled transaction between unrelated parties.
- **Step 2** Normal profit margin achieved during an uncontrolled transaction of purchase, or resale of the same, or similar product is deducted from the price identified in Step 1.
• **Step 3** Any differences arising out of transactions, which are compared between two enterprises in the open market can also be taken as adjustments to the price; if it would materially affect the transaction.

• **Step 4** Price, which is computed on the mentioned basis, is representative of the arm’s length price, with respect to the purchase of goods and articles.

**Application of CUP method depends on the following important principles:**

- Comparable uncontrolled transaction needs to be identified;
- Price charged in comparable uncontrolled transaction should be identified;
- Any differences occurring between controlled and uncontrolled transactions will have to be computed;
- Such differences will have to be effected as adjustments to the A.L.P.

**Resale price method**

This method starts with a premise that the price at which a product is resold to an independent enterprise by an associate enterprise.

- **Step** Identification of the price charged in the transaction between the related parties;
- **Step 2** If the transferee effects a resale of the same goods to an unrelated party, then the resale price is to be noted;
- **Step 3** From the mentioned resale price, the quantum of normal gross profit accruing to an unrelated party is deducted;
- **Step 4** The price, so arrived at, is adjusted again if there are functional or other differences arising out of accounting practices between the transaction under scrutiny and comparable uncontrolled transactions. This adjustment needs to be made if such a difference could materially affect the gross profit margin in the open market;
- **Step 5** If any further expenses are incurred by the party with respect to purchase of material or goods or services, such expenses are also adjusted in order to arrive at the arm’s length price.

Let us understand this better with an example.

Suppose a company receives an air conditioner from its parent company B in the United Kingdom at Rs.15,000 per unit and sells the same at Rs.20,000 per unit. The company also receives a bottle cooler from company C, which is an unrelated party, for Rs.12,000 and sells the bottle cooler at 15,000.

Operating, selling, and distribution expenses per unit are of the order of Rs.2,000. Both the products are sold in the market under identical conditions. As the second transaction is with an unrelated party, this transaction is taken as the basis, as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale value of bottle cooler</td>
<td>Rs.15,000</td>
</tr>
<tr>
<td>Less: Cost of sales</td>
<td>Rs.12,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>Rs.3,000</td>
</tr>
<tr>
<td>Less: Operating expenses</td>
<td>Rs.2,000</td>
</tr>
<tr>
<td>Gross margin</td>
<td>Rs.1,000</td>
</tr>
<tr>
<td>Gross margin as a percentage of sale</td>
<td>6.67 per cent</td>
</tr>
</tbody>
</table>

This margin is to be applied in the case of the related transaction of Company A and Company B.
Cost of sales  Rs.15,000
Operating expenses  Rs. 2,000
Total  Rs.17,000
Gross margin at 6.67 per cent  Rs. 1,134
Transfer price  Rs.18,134

Profit Split Method

Profit Split Method (PSM) is applied to interrelated transactions when it is not possible to evaluate them separately. It starts with the identification of the profit to be split for the associated enterprise. The basis for such a profit split will be the functions performed/assets. The relative contribution of each associated enterprise in the related transactions is evaluated on the basis of the functions performed, assets utilized, and risk involved.

The combined profits are split between enterprises, in relation to their respective contribution. Steps involved in applying this method are given as follows:

1. **Step 1** : Determination of the total operating profit before deduction of interest and taxes in a controlled transaction;
2. **Step 2** : Splitting the mentioned operating profit, arising out of a controlled transaction between two related parties, on the basis of functions performed, assets utilized and the risk involved by each non-arm's length party, in relation to what arm's length parties would have obtained;
3. **Step 3** : Such apportioned profit will have to reckon the arm’s length price, in relation to the transaction between the related parties.

Suppose X and Y are related companies. X sells goods for further sale to the market.

<table>
<thead>
<tr>
<th>Description</th>
<th>X Ltd.</th>
<th>Y Ltd.</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale</td>
<td>100</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>70</td>
<td>90</td>
<td>70</td>
</tr>
<tr>
<td>Gross profit</td>
<td>30</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>Operating expenses including selling and distribution</td>
<td>15</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>Operating profit</td>
<td>15</td>
<td>30</td>
<td>35</td>
</tr>
</tbody>
</table>

If the total cost is recalculated taking into account return on capital employed, the revised TP will be as follows.

<table>
<thead>
<tr>
<th>Description</th>
<th>X Ltd.</th>
<th>Y Ltd.</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital employed</td>
<td>100</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Return on capital employed @ 12 per cent</td>
<td>12</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Total cost including return for X (70+15+12) and Y = (90+20+18)</td>
<td>97</td>
<td>128</td>
<td>131</td>
</tr>
<tr>
<td>Apportionment of operating profit 30 in the ratio of total cost including return</td>
<td>23.66</td>
<td>6.34</td>
<td>30</td>
</tr>
<tr>
<td>Operating profit</td>
<td>108.66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Transfer price vide PSM work out to Rs. 108,66 (thousand) against Rs.100 (thousand).

### Transactional Net Margin Method

This method is generally applicable only to special transactions, where the characteristics or specifications or quality standard makes it difficult to obtain a market price for the similar product, or service. A normal net profit margin in a similar transaction may be available, however. The steps followed in this method are as follows:

- **Step 1** The net profit margin realized by the party from a transaction with a related party is calculated, taking into consideration costs incurred/assets employed or to be employed by the party;
- **Step 2** The net profit margin obtained by the party or by an unrelated party from a similar uncontrolled transaction is calculated;
- **Step 3** The net profit margin obtained in Step 2 is adjusted to take into account the differences between the transaction in question and comparable uncontrolled transactions, if they could materially affect the quantum of net profit margin in the open market;
- **Step 4** The net profit margin realized by the party, as per Step 1, is established to be the same as the net profit margin arrived at in Step 3;
- **Step 5** The net profit margin, thus arrived at, is taken into account to compute an arm’s length price, related to the transaction.

For this purpose, the net profit margin is either net profit before tax or net profit before interest and tax, or gross profit as a percentage of operating expenses. Let us understand this with an example. Suppose two subsidiaries of a multinational company have recorded their profit and loss statement as follows:

**Subsidiary A (manufacturing company)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales to distribution B</td>
<td>20,000</td>
</tr>
<tr>
<td>Less: Conversion cost</td>
<td>10,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>10,000</td>
</tr>
<tr>
<td>Opening expenses</td>
<td>6,000</td>
</tr>
<tr>
<td>Net profit</td>
<td>4,000</td>
</tr>
</tbody>
</table>

**Subsidiary B (distribution company)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale to unrelated parties</td>
<td>40,000</td>
</tr>
<tr>
<td>Less: Purchase from A</td>
<td>20,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>20,000</td>
</tr>
<tr>
<td>Opening expenses</td>
<td>8,000</td>
</tr>
<tr>
<td>Net profit</td>
<td>12,000</td>
</tr>
</tbody>
</table>

In this example, it becomes necessary to find out whether the TP of Rs.20,000 between subsidiary A and subsidiary B is consistent with the price offered by unrelated companies for a similar product under similar circumstances.

**Activity Based Costing (ABC)**

The cost accounting system is essentially based on the principle that all production costs have to be
absorbed into the cost object. Making a distinction between the costs that are directly traceable to the cost objects (direct costs) and those that are difficult to trace (indirect costs) would enhance the understanding of the cost accounting system. Direct costs are those costs that can be easily and accurately traced to a particular cost object. The term “accurate cost tracing” refers to the assignment of direct costs based on cause-and-effect relationship to a particular cost object. In contrast, indirect costs, commonly known as overheads, cannot be traced directly to a particular cost object because they are usually common for several cost objects. Indirect costs are therefore assigned to cost objects using cost allocations (Drury, 2012).

TRADITIONAL COSTING SYSTEMS

Traditional costing system identified as volume-based systems, traditional absorption or conventional costing systems allocate overheads to the cost objects based on the volume of products, by using measures of output volume like direct labour hour and direct labour cost (Cooper & Kaplan, 1988a; Johnson & Kaplan, 1987).

The aim of this section is to outline the two-stage allocation process used in traditional costing system. This section will also critically appraise the drawbacks of traditional costing system and justify the choice of ABC as a better alternative.

The origin and development of ABC

Along with variance analysis, return on investment and balanced scorecard, ABC is considered as one of the most important innovation of the twentieth century by many academics and practitioners (Gosselin, 2007).

Johnson (1992) traced the origin of ABC back to the early 1960s, when General Electric (GE) developed a model of activity cost analysis to improve the quality of its information on indirect costs. The costs of the activities were determined by GE by analyzing the effort of all the activities. Thus, GE demonstrated how costs were incurred by the activities. GE may have been the first organization to use the term (activity) to describe work that causes cost (Hoque, 2005). Later, Staubus (1971) has studied the activity costing and explained some of the basic concepts of ABC system. In his book (Activity Costing and Input-Output Accounting) published in 1971, Staubus analyzed the concepts of cost, objects of cost and costing. Besides, he suggested a conceptual framework for cost accounting that defines activities as objects of costing (Hoque, 2005).

Jones and Dugdale (2002) contradict with the origin of the ABC system as an activity-based accounting approaches (Staubus approach) and the practices in GE as explained by earlier literature. They reject these references as occasional and vague references. According to them, these references do not define ABC clearly, at least as we know it nowadays. Moreover, they believe that these are recollected retrospectively after the “brand-named” product ABC system had been produced. On the contrary, they associate the origin of ABC system with the work of Professors Robin Cooper of the Claremont Graduate School and Robert Kaplan of Harvard Business School, and Tom Johnson, who brought “ABC” to global attention. They found that the ABC concept was being applied in a small number of large USA manufacturing business, which were dissatisfied with the conventional approaches to costing as apparent. The experiences of these organizations were published as Harvard Case Studies that initiated a series of articles which outlined and developed the application of ABC. Thus ABC owes its current status both to the practitioners who first designed and effected its practical implementation, and then to the academics who translated this work into a more general framework and contributed to its popularity and dissemination through their publications.

3.3.2 ABC Definition

Before defining the ABC system, it is imperative to understand what ABC system is. ABC system, which has
become an important aspect of manufacturing or service organizations, can be considered as an alternative paradigm to traditional cost-based accounting systems. According to Hilton (2011, p. 172), ABC is a “two-stage procedure to assign overhead costs to products. The first stage identifies significant activities in the production of the three products and assigns overhead costs to each activity in accordance with the cost of the organization’s resources used by the activity. The overhead costs assigned to each activity comprise an activity cost pool. After assigning overhead costs to activity cost pools in stage one, cost drivers appropriate for each cost pool are identified in stage two. Then the overhead costs are allocated from each activity cost pool to each product line in proportion to the amount of the cost driver consumed by the product line”.

The Activity-Based Costing (ABC) is a costing system, which focuses on activities performed to produce products. ABC is that costing in which costs are first traced to activities and then to products. This costing system assumes that activities are responsible for the incurrence of costs and create the demands for activities. E.g., an accounting firm prepares tax returns and a University teaches students. Costs are charged to products based on individual product's use of each activity. In traditional absorption costing system, costs are first traced not to activities but to an organizational unit, such as department or plant and then to products. It means under both, ABC and traditional absorption costing system the second and final stage consists of tracing costs to the product.

Several definitions have been found in the literature that succinctly specify the involved concept.

Cokins (1996) considered ABC system as “the mathematics used to reassign costs accurately to cost objects, that is, outputs, products, services, and customers. Its primary purpose is for profitability analysis” (p. 40).

For Turney (1996), ABC refers to a methodology that measures the cost and performance of activities, resources and cost objects. The assigns costs to activities based on their consumption of resources and then allocates costs to cost objects based on their required activities”.

The Computer Aided Manufacturing-International’s (CAM-I) defined ABC system in its glossary as a method that measures the cost and performance of process-related activities and cost objects, through the assignment of costs to activities, and cost to cost objects.

The Computer Aided Manufacturing-International’s (CAM-I) and Turney’s (1996) definitions of ABC system suggest that ABC is not just about product costing but tends to measure the performance of activities to ascertain the quality of work done pertaining to that activity.

According to a definition provided by Swenson’s (1995, p. 167) ABC is “an information system that assists with decision-making, essentially a decision-support system”. This definition focuses on the use of ABC as a decision-support system.

Horngren et al. (2012, p. 146) defined ABC system as a method that “refines a costing system by identifying individual activities as the fundamental cost objects”.

After examining the above definitions, ABC system can be defined as an alternative costing technique for the traditional costing systems to assist in decision-making and to improve the performance by allocating overheads in an objective and reasonable way to cost objects. Using ABC, all activity cost pools can be identified in an organization and overheads assigned to all activities concerning product or service. Then, ABC allocates the activity cost pools to products and services based on cost driver.

### Evolution of Activity-Based Costing System (ABC)

The concepts of Activity-Based Costing (ABC) were developed in the manufacturing sector of the United States during the 1970's and 1980's. During this time, the consortium for advanced manufacturing – International, now known simply as CAM-I, provided a formative role for studying and formalizing the principles that have become more formally known as Activity Based Costing.
Many deficiencies of Traditional Cost systems led to the discovery of the ABC System. Which are as under:

(i) The present costing system has developed convenient overhead recovery basis and blanket overhead recovery are acceptable when valuing stocks for financial reporting, but they are inappropriate when used for decision-making and typical product strategy decisions. Such decisions have implications. Over 3-5 years and over this period many fixed costs become variable.

(ii) It’s easy to determine accurate costs of products or services when a company has only a few products. When companies expand their product offerings and these products use different amount of resources, such as supervision and quality control, it is more difficult to determine accurate costs of products. This situation is the main reason why companies use ABC.

(iii) Traditional costing fails to capture cause and effect relationships, if focused on the cost incurred.

(iv) Traditional accounting was confined merely to furnish information at the product level. The new manufacturing technology demands the feedback of performance while production is still in progress rather than history.

Therefore, in order to overcome the inadequacies of traditional methods of overhead absorption, Activity Based Costing has been devised.

**Manufacturing Cost Hierarchy**

1. **Unit-Level Activities**
   Costs are assigned to activities that act on each individual unit of product or service, such as direct labour or materials.

2. **Batch-Level Activities**
   Costs are assigned to activities associated with a batch or group of units of products, such as set-up costs, material movements or purchase orders.

3. **Product-Sustaining Activities**
   Costs are allocated to activities which are performed to support a specific product or service, such as process engineering, product specifications or engineering change notices.

4. **Facility-Sustaining Activities**
   Costs, which cannot be traced to individual units, batches, or products are related to maintaining the buildings and facilities. This refers to the activities that are otherwise considered as operation’s support activities (service and administrative activities) such as providing security and safety, performing maintenance of general purpose machines, managing the plant, taxes, building and grounds or heating and lighting.

**Implementation Stages of ABC System**

The implementation of ABC system refers to the process of carrying out the decision to adopt the system. Krumwiede and Roth (1997) claim that ABC system is an information technology (IT) innovation, which supports managers with information to make decisions, as opposed to a pure technical innovation. Accordingly, managers need to comprehend the stages of the IT implementation process to implement ABC system successfully.

Cooper and Zmud (1990) developed a theoretical model that explains the main stages of IT implementation. According to them, the IT implementation process is categorized into six sequential stages: initiation, adoption, adaptation, acceptance, routinization and infusion. This model forms base on which other studies (for example,
Anderson, 1995; Krumwiede, 1998a), with respect to implementation stages, have been built. Though the boundaries between these stages are not distinct, there are some characteristics that differentiate each stage.

Few years later, Krumwiede (1998a) refined Cooper and Zmud’s stage further to capture specific aspects of ABC system. He determined the implementation stages based on the level of development and the degree of usage of ABC system information for decision-making outside the accounting department. He expanded the Cooper and Zmud’s model to ten stages: (A) Not considered, (B) Considering, (C) Considered then Rejected, (D) Approved for Implementation, (E) Analysis, (F) Getting Acceptance, (G) Implemented then Abandoned, (H) Acceptance, (I) Routine System and (J) Integrated System. He first tested what he called the adoption stages (A–D) among non-ABC adopters (Stages A–C) and ABC adopters (Stage D). Later, he tested the implementation stages (Stage E and beyond). Table (3.1) includes a brief description of the various implementation stages and the goals that should be achieved by the end of each stage. It shows how a firm makes progress towards the highest level of implementation.

Subsequently, Brown et al. (2004) used different terms to acknowledge Krumwiede’s stages. They first tested initiation of the interest in ABC system (Stages a to B and beyond), not having considered ABC system (Stage a) and having interest in ABC initiatives (Stages B, C and D). They then tested the adoption decision stages (Stage d and beyond) by comparing those who have adopted the innovation (Stage D) with those who have rejected the innovation (Stage C).

### KRUMWIEDE’S ABC IMPLEMENTATION MODEL

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not considered</td>
<td>ABC system has not been seriously considered. Use either single or departmental / multiple plant wide allocation methods only.</td>
</tr>
<tr>
<td>Considering</td>
<td>ABC system is being considered and implementation is possible, but implementation has not been approved.</td>
</tr>
<tr>
<td>Considered then Rejected</td>
<td>ABC system has been considered (not implemented) but was later rejected as a cost assignment method.</td>
</tr>
<tr>
<td>Approved</td>
<td>Implementation approval has been granted to implement ABC system and devote / spend the necessary resources, but analysis has not yet begun.</td>
</tr>
<tr>
<td>Analysis</td>
<td>ABC implementation team is in the process of determining project scope and objectives, collecting data and / or analyzing activities and cost drivers.</td>
</tr>
<tr>
<td>Getting Acceptance</td>
<td>Analysis is complete and ABC model has project / implementation team support, but ABC information is not yet used outside of accounting department for decision-making.</td>
</tr>
<tr>
<td>Implemented then Abandoned</td>
<td>ABC system was implemented and performed but is not being pursued at this time.</td>
</tr>
<tr>
<td>Acceptance</td>
<td>Occasionally used by non-accounting upper management or departments for decision-making. General consensus among non-accounting departments that model provides more realistic costs. Still considered a project or model only with infrequent updates.</td>
</tr>
<tr>
<td>Routine System</td>
<td>Commonly used by non-accounting upper management or departments for decision-making and considered normal part of information system.</td>
</tr>
</tbody>
</table>

### The Benefits of the ABC System

The conventional cost systems used before the origination of ABC systematically distorted product costs, leading to wrong decisions being taken on the basis of these costs (Johnson & Kaplan, 1987; Cooper & Kaplan, 1988a). The ABC system originated as a means of improving product cost information in a manufacturing context, particularly to provide accurate information to managers about the costs of making and selling diverse products. It has been designed to produce more accurate and detailed information of production and thereby gets rid of the distortions of information in the traditional costing system (Cooper & Kaplan, 1988a; Innes & Mitchell, 1991;
Cooper et al., 1992; Swenson, 1995; Clarke et al., 1999; Majid, et al. 2008; Yousif & Yousif, 2012). The ABC was posed as a more accurate costing method, particularly where non-volume related overheads are significant, and a diverse product line is manufactured (Innes & Mitchell, 1990). It has been claimed that accurate product costs are critical to pricing decisions, new product introductions, decisions to drop out-of-date products and decisions on how to respond to the products of competitors correctly and on time, since product costs identify causes of resource consumption and ways of saving resources, especially at the product and process design stage (Chongruksut, 2002).

Several studies report that the key benefits of the ABC system are cost control and cost reduction, in addition to improved profitability (Innes & Mitchell, 1991, 1995; Bailey, 1991; Nicholls, 1992; Adler, et al., 2000; Cohen et al., 2005; Majid & Sulaiman, 2008). Cost-reduction analysis conducted through the ABC system does not reduce cost directly, instead it will help in identifying the activities that are responsible for additional cost and by reorganizing these activities (e.g., decreasing the time to set up a machine or cutting down redundant activities) and redeploying the redundant resources, cost can be reduced (Turney, 1996). Cost analysis, thus conducted by the ABC system improves the operations and increases profitability (Kaplan, 1992).

In addition, the ABC system is necessary to enhance the collection of comprehensive cost data for performance measurement (Swenson, 1995; Innes & Mitchell, 1991, 1995; Chongruksut, 2002; Cohen et al., 2005; Turney, 2010), to collect more relevant data for management to make better decisions on product pricing, product designing, product mix, process improvement, market segments and customer mix and profitability (Cooper & Kaplan, 1988b; Kaplan, 1992; Swenson, 1995; Innes & Mitchell, 1991, 1995; Anand et al., 2005; Turney, 1996 & 2010). Turney (2010) considered ABC system as the heart of integrated performance management systems. ABC can be utilized to measure performance, especially when the ABC is used as a part of performance management in the organizations. The performance measures are built into the process dimension of a scorecard. The activity costs are used to set targets and score goals around performance of the process.

The emphasis of cost management system on activities can help management to identify non-value-added costs and eliminate the activities that cause them (Hilton, 2011; Akyol, Tuncel, & Bayhan, 2005; Turney, 2010; Horngren et al., 2012). By eliminating non-value added or non-productive activities, the ABC system can help decision makers and quality practitioners understand the true cost of quality and improve operations and cost structures (Narong, 2009). Horngren et al. (2012) claim that the ABC system take a long-term perspective and focus on improving processes by eliminating non-value-added activities and reducing the costs of performing value-added activities. Innes and Mitchell (1991) added that ABC provides a reliable indication of long-term variable product cost, which is particularly relevant to managerial decision-making at a strategic level. ABC system, therefore, is more useful for long-term pricing, cost control and capacity management.

Kaplan (1992) points that the ABC system is capable of supporting product designers in taking decisions at critical moments of adjustment between minimizing cost and adequate performance. Additionally, the product designers have an opportunity to evaluate the cost information of diverse designs and compare them to produce the most cost-effective product designs (Cooper & Turney, 1989). At the same time, Atkinson et al. (2012) points that when product costing technique is used at the designing stage, it would support the prediction of target costing as the product cost can measure the diverse products to manufacture and sell. Further, the evaluation of profitability by product group or customer type can be made (Morrow, 1992).

Profitability analysis is essential for the management to make decisions about the market and customer and the cost involved in any realignment of the equation in any market segment (Morrow, 1992). This analysis can be created by building of cost layers which in turn enhances the revenue values. As the ABC system brings about an understanding between each customer and market segment and the resources used by them, clarity can be obtained in the collection of costs at each cost layer. Kaplan (1992) therefore suggests that ABC information will be a useful tool to evaluate the market segments and customers in order to satisfy them profitably.
Budgetting and performance measurement is yet another advantage gained by managers on implementing the ABC system as the objectives of each activity can be drawn from the activity-based budgets (Chongruksut, 2002; Cohen et al., 2005;), and future resource needs can be assessed (Innes & Mitchell 1995; Turney 1996). A network of activity-based budgets can be connected between activities, the organizational acts and the resources consumed; and the underlying difference between resource consumption and resource provision (Morrow 1992). Thus, activity-based budgets provide control over operations and performance measurement.

The ABC system improves the ability of an analyst to estimate the cash flows associated with a proposed project by separating costs into activity cost pools and identifying a cost driver for each pool. Hence, analyst can more accurately determine the levels of various costs that will be incurred, if the project is implemented (Hilton, 2011).

**ABC Pitfalls**

The proponents of ABC have written much of the ABC literature but a little attention has been given to its potential limitations. Kaplan and Anderson (2007, p. 138) stated that “over the past 15 years, activity-based costing has enabled managers to see that not all revenue is good revenue and not all customers are profitable customers. Unfortunately, the difficulties of implementing and maintaining traditional ABC system have prevented them from being adopted on any significant scale”.

Kaplan and Anderson (2007, p. 5) summarized the main pitfalls of the ABC system thus:

a. The interviewing and surveying process is time-consuming and costly.
b. The data for the ABC model are subjective and difficult to validate.
c. The data were expensive to store, process, and report.
d. Most ABC models are local and do not provide an integrated view of opportunities profitability for the enterprise.
e. The ABC model could not be easily updated to accommodate changing circumstances.
f. The model is theoretically incorrect when it ignores the potential for unused capacity.

**LESSON ROUND-UP**

1. Contribution \( (C) = \text{Sales} - \text{Variable cost} (S - V) \)
   Or \( (C) = \text{Fixed cost} + \text{Profit} (F + P) \)
   Or \( (C) = \text{Fixed cost} - \text{Loss} (F - L) \)
   Thus \( S - V = F + P \)
   Or \( S - V = F - L \)

Also Contribution = Sales in Rs. X P/V ratio
   Or Contribution = (Sales at BEP in Rs. X P/V ratio) + Profit
   Or Contribution = (Sales at BEP in units x Contribution per unit) + Profit
   Or Contribution = (Margin of Safety in Rs. X P/V ratio) + Fixed cost
   Or Contribution = (Margin of Safety in units x C per unit) + Fixed Cost
   Or Contribution = \( \frac{\text{Profit}}{\text{Margin of safety in \%}} \)
2. Contribution/Sales ratio or Profit/Volume ratio (C/S or P/V ratio)

\[
P/V \text{ ratio} = \frac{\text{Contribution}}{\text{Sales}} = \frac{C}{S} = \frac{S-V}{S} \text{ ratio in } \% \times \frac{C}{S} 100
\]

Also

\[
P/V \text{ ratio} = \frac{\text{Changes in contribution}}{\text{Changes in sales}} = \frac{\text{Change in profit}}{\text{Change in sales}}
\]

\[
P/V \text{ ratio} = \frac{\text{Fixed cost}}{\text{B.E. Point in Rs.}} \times 100
\]

\[
P/V \text{ ratio} = \frac{\text{Profit}}{\text{Margin of safety in Rs.}} \times 100
\]

\[
P/V \text{ ratio} = 100 – \text{variable cost as a } \% \text{ of sales}
\]

3. Break-even point (BEP)

\[
\text{BEP (in units)} = \frac{(\text{Total fixed cost})}{(\text{Contribution per unit})} = \frac{F}{C}
\]

\[
\text{BEP (in units)} = \frac{F+\text{Profit}}{C(\text{per unit})} \text{ in Rs.} = \frac{F+\text{Profit}}{\frac{P}{V} \text{ ratio}}
\]

\[
\text{BEP} = \text{Actual sales} – \text{Margin of safety}
\]

4. Calculation of sales to earn a given profit

\[
(\text{in units}) = \frac{F+\text{Profit}}{C(\text{per unit})} \text{ in Rs.} = \frac{F+\text{Profit}}{\frac{P}{V} \text{ ratio}}
\]

5. Cost indifference point

\[
\frac{\text{(difference in fixed cost)}}{\text{(difference in P/V ratio or Contribution per unit)}}
\]

6. Margin of Safety (M/S)

\[
= \text{Actual sales} – \text{Break-even point}
\]

\[
\text{M/S ratio} = \frac{\text{(Actual sales-BEP)}}{\text{(Actual sales)}} \times 100
\]

Or Margin of safety in % of sales

\[
= \frac{(\text{Margin of safety})}{\text{(Actual sales)}} \times 100 = 100 - \text{B.E. Sales in } \%
\]

\[
\text{M/S} = \frac{\text{Profit}}{\text{(P/V ratio)}}
\]

\[
\text{Profit} = \text{Margin of safety} \times \text{P/V ratio}
\]

\[
\text{Profit} = \text{Actual sales} \times \text{M/S ratio} \times \text{P/V ratio}
\]

7. Break-even sales in %

\[
= \text{Actual sales} \times \text{Break-even point}
\]
M/s ratio = \( \frac{B.E. \text{ Point}}{\text{Total sales}} \times 100 \)

= 100 – Margin of safety in %

Profit = Sales – Total cost

Or = Sales – Variable cost – Fixed cost

Or = Contribution – Fixed cost

Or = Margin of safety in Rs. X P/V ratio

Fixed Cost = Sales – Variable cost – Profit

Or = Contribution – Profit

= Total cost – Variable cost

= Sales at BEP in Rs. x P/V ratio

Overall Break-even point (of all products) = \( \frac{\text{Total fixed cost of all the products}}{\text{Overall P/V ratio}} \)

**SELFTEST QUESTIONS**

1. What do you mean by marginal costing discuss its usefulness and limitations.

2. Define marginal cost and marginal costing. How would you treat variable cost and fixed costs in marginal costing?

3. Marginal costing rewards sales whereas absorption costing rewards production ‘Comment’.

4. State the distinction between marginal cost and absorption costs as regards valuation of finished goods inventories.

5. What do you understand by contribution? How is it related to profit?

6. What do you understand by marginal cost equation?

7. What is P/V ratio? Explain its uses.

8. What are the uses of CVP analysis? Discuss the various ways of presenting CVP relationship.

9. What do you understand by (a) break-even point; and (b) break-even chart?

10. First class co., manufacturing ball pens, is working at 40% capacity, producing 10,000 pens per year.

    The cost elements for each ball pen are given as under:

    | Material    | Rs.20 |
    | Labour      | Rs.6  |
    | Overheads   | Rs.10 (40% variable) |

    Each ball pen sells for Rs.40. the selling price falls by 3% if production is at 50% capacity and by 5%
    if worked at 90% capacity. The fall in selling prices is accompanied by similar fall in material prices.

    You are required to find out profit at 50% and 90% capacities using marginal costing approach. Also
    calculate B.E. points at these two levels.

11. From the followings data, you are required to calculate the break-even point and net sales value at this
    point:

    | Selling price per unit | Rs.25 |
    | Direct material cost per unit | 8 |
    | Direct labour cost per unit | 5 |
    | Fixed overheads | 24,000 |
Variable overheads @60% on direct labour
Trade discount 4%

If sales are 15% and 20% above the break-even volume, determine the net profits.

12. A company budget for a production of 1,50,000 units. The variable cost per units is Rs.14 and fixed cost is Rs.2 per unit. The company fixes its selling price to fetch a profit of 15% on cost.
   (a) What is the break-even point?
   (b) What is the profit-volume ratio?
   (c) If it reduces its selling price by 5% how does the revised selling price affect the break-even point and the profit volume ratio?
   (d) If a profit increase of 10% is desired more than the budget, what should be the sales at the reduced prices?

13. You are given:
   Margin of Safety = Rs10,000 which represent 40% of sales P/V ratio = 50%
   Find out:
   (a) Break-even sales
   (b) Fixed cost
   (c) Total sales
   (d) Profit

14. (a) From the following particulars draw a break-even chart and find out the break-even point.
   Variable cost per unit Rs.15
   Fixed cost Rs54,000
   Selling price unit Rs.20
   (b) What should be the selling price if break-even point is to be brought down to 6,000 units.

15. (i) Ascertain profit when sales = Rs.2,00,000 fixed cost = Rs.40,000, Break-even point = Rs.1,60,000
   (ii) Ascertain sales, when fixed cost Rs.20,000 profit = Rs.10,000, Break-even point is Rs.40,000
Lesson 19
Valuation, Principles and Framework

LEARNING OBJECTIVES

Valuation is more of an art-based professional experience of the valuer rather than a science-based on empirical studies and logics. Business valuation is the process of determining the “Economic Worth” of a company based on its Business Model under certain assumptions and limiting conditions and subject to data available on the valuation date. It is an important concept in corporate finance and business management. Valuation is a vital concept and is required in various fields or areas like merger & acquisitions, amalgamations and dispute resolution. After studying this lesson, you will be able to understand:

- Importance of valuation
- Methods/Approaches of valuation
- Relation between WACC and NPV
- Relation between WMCC and NPV
- Indian Accounting Standard
- IAS applicable for valuation
INTRODUCTION

Knowing what business is worth and what determines its value is prerequisite for intelligent decision-making. Corporate valuations form the basis of corporate finance activities including capital-raising, mergers & acquisitions (M&A) and also to meet regulatory/accounting requirements or for voluntary purpose. The rapid globalization of the world economy has created both opportunities and challenges for organizations leading to uncertainty blowing across global markets and raising the importance of independent valuations all over the world. Justifying the value of businesses has grown more complex and challenging it has been accepted that valuation is not an exact science; it depends upon a number of factors like purpose, stage of business, past financials, industry scenario, management and promoters strengths.

Valuation is more of an art-based on professional experience of the valuer rather than a science-based empirical studies and logics. Business valuation is the process of determining the “Economic Worth” of a company based on its Business Model under certain assumptions and limiting conditions and subject to data available on the valuation date. It is an important concept in corporate finance and business management. Supposing a business is for sale, how does one know what is the real value of that business is? More basically, how does a business owner know the net value of his business, or how is valuing a business for sale accomplished?

AREAS WHERE VALUATION IS USED

<table>
<thead>
<tr>
<th>Areas</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mergers &amp; Acquisitions</td>
<td>Valuation is an important aspect in M&amp;A. It not only assists business owners in determining the value of their business, but also helps them to maximize the value of their business considering a sale, merger, acquisition, joint venture, or strategic partnership.</td>
</tr>
<tr>
<td>Succession Planning</td>
<td>Succession to family members: In planning for the transfer of family business to the next generation.</td>
</tr>
<tr>
<td></td>
<td>Succession to employees: For many closely held businesses, the sale of the business to one or more key employees is often a viable succession strategy.</td>
</tr>
<tr>
<td></td>
<td>Succession to outside parties: It comprises mergers, acquisitions, purchase and sale of businesses.</td>
</tr>
<tr>
<td>Going Public</td>
<td>In general, when a new company goes for an Initial Public Offering (IPO), it is doing that in order to generate capital to grow its business. In such circumstances, a question arises as to how to evaluate the fair value of such a stock. The Indian Capital Market follows a free pricing regime and thus the accurate pricing of an IPO is of immense importance.</td>
</tr>
<tr>
<td>Dispute Resolution</td>
<td>Valuation is an increasingly important aspect of many commercial disputes. Before deciding how to manage a dispute, it is necessary to determine the likelihood of a successful outcome and the potential stake involved. Judicial precedents are also available that affect the selection of valuation methodologies and applicability of discounts/ premiums.</td>
</tr>
</tbody>
</table>

Voluntary Assessment: At times, the management wants to know the true and fair value of the business for which they undertake the exercise of voluntary assessment for their internal management purposes and future decision-making.

The art of valuation lies in identifying the key value drivers and key risk areas after analyzing the following:

- Nature of Business, its history, future prospects, and growth potential
- Promoters and management background
- Core Team strength
- Profitability strategies
- Competitive landscape and differentiation
- Economic outlook and industry trend
- Purpose of valuation and size of transaction

**Generally Acceptable Methodologies of Valuation**

A number of business valuation models can be constructed that utilize various methods under the broad business valuation approaches. Most treatises and court decisions encourage the valuer to consider more than one method, which must be reconciled with one another to arrive at a conclusion. Understanding of the internal resources and intellectual capital of the business being valued is as important as the economic, industrial and social environment. The choice of the appropriate valuation approach (or approaches) to be used in a given valuation project is based on the judgment of the valuer. The valuer’s choice of methods is determined by the characteristics of the business to be valued, the purpose and use of the valuation and its report, the pattern of historical performance and earnings of the subject company, the company’s competitive market position, experience and quality of management, the availability of reliable information requisite to the various valuation methods, the marketability of equity ownership interest to be valued, and others. These factors are summarized below:

- History and nature of the business
- Industry and general economic outlook
- Book value and financial condition
- Earning capacity
- Dividend-paying capacity
- Prior sales and size of the block of stock; and
- Comparisons to similar publicly traded guideline companies.

**Approaches of Valuation**

There are broadly three approaches of valuation:

- Asset Approach
- Income Approach
- Market Approach
1. ASSET APPROACH

The asset-based approach focuses on the company’s net asset value (NAV), or the fair-market value of its total assets minus its total liabilities to determine what it would cost to recreate the business. There is some room for interpretation in the asset approach in terms of deciding which of the company’s assets and liabilities to include in the valuation, and how to measure the worth of each.

The asset-based approach is best used when a business is non-operating or has been generating losses, and the company’s focus is its holding investments or real estate. The adjusted net asset method is commonly used for estimating the value of the business. The difference between the fair market value of the company’s total assets and the fair market value of its total liabilities determines its fair market value. This technique also includes the value of all of the business’s intangible assets and liabilities, such as goodwill and pending litigations.

The cost-based approach, the primary emphasis places upon the fair market value of the assets and liabilities of a business. As a result, this approach uses various methods that consider the value of individual assets and liabilities including intangible assets. The most well-known method in this approach relies upon reported balance sheet assets and liabilities generally termed as book value. It should be recognized, however as per the book value concept assets are reported in accordance with various accounting conventions that may or may not accurately reflect fair market value.

It is further classified into:

(a) Net Asset Value

The total value of the assets of a company less its liabilities is its net asset value. For the purpose of valuation, the usual thing to do is to divide the net assets by number of shares to get the net assets per share. This is the asset value belonging to each share in the same way as the price-earning ratio measures the profit per share.

Net asset value is useful for shares valuation in sectors where the company value come from the held assets rather than the stream of profit that was generated by the company business. The examples are property companies and investment trusts. Both are convenient ways wherein the investors can buy diversified bundles of the assets they hold.

The assets’ value can be obtained at book value or market prices and used depending on the circumstances and the sector. Some assets need to be excluded. One example of this is the tangible book value of NAV.

The value as per NAV is arrived as follows:

- Total assets (excluding miscellaneous expenditure & debit balance in P&L) XX
- Less: Total Liabilities XX
- NAV & debit XX

OR

- Share Capital xx
- Add: Reserves xx
- Less: Miscellaneous expenses xx
- P& L (Dr balance) xx
- NAV xx

Value per share = \( \frac{NAV}{\text{No. of shares}} \)
Illustration 1.

Following is the balance sheet of A Ltd. as on 31st March, 2017:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I EQUITIES AND LIABILITIES</strong></td>
<td></td>
</tr>
<tr>
<td>1. Shareholders’ funds</td>
<td></td>
</tr>
<tr>
<td>(a) Share Capital</td>
<td></td>
</tr>
<tr>
<td>Authorized, Issued subscribed and paid-up capital</td>
<td></td>
</tr>
<tr>
<td>14% Preference shares of Rs. 100 each</td>
<td>7,50,000</td>
</tr>
<tr>
<td>Equity shares of Rs. 10 each, fully called up and paid up</td>
<td>22,50,000</td>
</tr>
<tr>
<td>(b) Reserve and surplus</td>
<td></td>
</tr>
<tr>
<td>General reserve</td>
<td>9,00,000</td>
</tr>
<tr>
<td>2. Non-current liabilities</td>
<td></td>
</tr>
<tr>
<td>15% Debentures</td>
<td>7,00,000</td>
</tr>
<tr>
<td>3. Current Liabilities</td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,00,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>43,50,000</td>
</tr>
<tr>
<td><strong>II ASSETS</strong></td>
<td></td>
</tr>
<tr>
<td>1. Non-current Assets</td>
<td></td>
</tr>
<tr>
<td>(a) Fixed Assets</td>
<td></td>
</tr>
<tr>
<td>Tangible Assets &amp; intangible Assets</td>
<td>32,50,000</td>
</tr>
<tr>
<td>(b) Investment</td>
<td>6,00,000</td>
</tr>
<tr>
<td>2. Current Assets</td>
<td></td>
</tr>
<tr>
<td>Misc-Current Assets</td>
<td>5,00,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>43,50,000</td>
</tr>
</tbody>
</table>

**Calculated under Net Assets method**

- (a) Discharge 15% debentures at a premium of 10%
- (b) Fixed assets 10% above the book value
- (c) Investments at par value
- (d) Current assets at a discount of 10%

**Solution:**

Net Asset Method: (in ‘000’s)

<table>
<thead>
<tr>
<th>Value of assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets (3250000 + 10%)</td>
<td>35,75</td>
</tr>
<tr>
<td>Investments</td>
<td>6,00</td>
</tr>
<tr>
<td>Current assets (500000 – 10%)</td>
<td>4,50</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>46,25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Less: Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15% debentures (700000 + 10%)</td>
<td>7,70</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,00</td>
</tr>
<tr>
<td><strong>33,55</strong></td>
<td></td>
</tr>
</tbody>
</table>
Illustration 2.

Calculate the value by net asset method

Balance Sheet of X Ltd as on 31.3.2018

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount</th>
<th>Assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity share capital of Rs. 100 each</td>
<td>1,00,000</td>
<td>Land &amp; Building</td>
<td>30,000</td>
</tr>
<tr>
<td>6% Debentures of Rs. 10 each</td>
<td>20,000</td>
<td>Plant &amp; Machinery</td>
<td>1,10,000</td>
</tr>
<tr>
<td>Reserve Fund</td>
<td>34,000</td>
<td>Stock</td>
<td>16,000</td>
</tr>
<tr>
<td>Dividend Equalization reserve</td>
<td>4,000</td>
<td>Debtors</td>
<td>14,000</td>
</tr>
<tr>
<td>Employee's Provident Fund</td>
<td>3,000</td>
<td>Cash</td>
<td>3,000</td>
</tr>
<tr>
<td>Trade Creditors</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit &amp; Loss A/c</td>
<td>2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,73,000</td>
<td></td>
<td>1,73,000</td>
</tr>
</tbody>
</table>

The assets of X Ltd are valued at 10% less with the exception of land & building which are valued at book value. Company to receive 5% of net valuation of the business as goodwill.

Solution:

Particulars                             Rs.
Assets as per balance sheet            1,73,000
Less: 10% reduction excluding
Land & building and cash               14,000
                                          1,59,000

Less: Liabilities
6% debentures                          20,000
Trade creditors                        10,000
Employees P.F 3,000                    1,26,000
Add: goodwill (5%)                    63,00
NAV                                     1,32,300

(B) Price to Book Multiple Method

The application of this method is similar to that of the P/E multiple method. Since the book value of equity is essentially the amount of equity capital invested in the firm, this method measures the market value of each dollar of equity invested.

This method can be used for
- companies in the manufacturing sector which have significant capital requirements;
- companies which are not in technical default (negative book value of equity);

The Price/Book Value Multiple of Comparable Company is arrived as follows:

Step 1- Weighted Average Market Price
Step 2 - Divide by: Value per share as per Net Assets Value

Step 3 - Price/Book Value Multiple

Illustration 3

NCH Corporation, which markets cleaning chemicals, insecticides and other products, paid dividends of Rs.2.00 per share in 2017 on earnings of Rs.4.00 per share. The book value of equity per share was Rs.40.00, and earnings are expected to grow 6% a year in the long term. The stock has a beta of 0.85, and sells for Rs.60 per share. (The treasury bond rate is 7%). Based upon these inputs, estimate the price/book value ratio for NCH.

Solution:

\[
\text{Dividend Payout Ratio} = \frac{2}{4} = 50\%
\]

\[
\text{Return on Equity} = \frac{4}{40} = 10\%
\]

\[
\text{Cost of Equity} = 7\% + 0.85 \times 5.5\% = 11.68\%
\]

\[
\text{Expected Growth Rate} = 6\%
\]

\[
\text{Price/Book Value Ratio} = \left(\frac{.1}{.5}(1.06)/(.1168 - .06)\right) = 0.93
\]

A simpler solution might be the following:

\[
\text{Price/Book Value Ratio} = \left(\frac{.10 - .06}{(.1168 - .06)}\right) = 0.70
\]

(This solution takes into account the relationship between ROE and g, i.e., \(g = b(ROE)\))

2. INCOME OR EARNING APPROACH

The Income-based method of valuations works on the premise that the current value of any business is a function of the future value that an investor can expect to receive from purchasing all or part of the business. In other words, the value of the business must be related to the profits it will earn and the cash it will generate in the future.

It is further divided into two methods:

(a) Discounted Cash Flow Method (DCF) - DCF expresses the present value of the business as a function of its future cash earnings capacity. In this method, the appraiser estimates the cash flow of any business after all operating expenses, taxes, and necessary investments in working capital and capital expenditure is being met. Valuing equity using the free cash flow to stockholders requires estimating only free cash flow to equity holders, after debt holders have been paid off. This method is more appropriate when future returns are expected to be substantially different from current operations. It usually has two stages, the first stage involves a discreet forecast of future earnings or cash flow to be discounted to the present using a discount rate, and the second stage involves the construction and discounting of a terminal value. The terminal value is determined when the entity’s future return stream is expected to achieve a stable long-term growth.

It is a method of valuing a project, company, or asset using the concepts of the time value of money. All future cash flows are estimated and discounted by using cost of capital to give their present values (PVs). The sum of all future cash flows, both incoming and outgoing, is the net present value (NPV), which is taken as the value of the cash flows in question.

\[
\text{PV of future sum} = \frac{FV}{(1+r)^n}
\]

OR

\[
= FV \times PVF(r,n)
\]

\[\text{PV of a series of Equal Future cash flows or Annuity}\]

\[= \text{Annuity Amount} \times PVAF(r,n)\]
Illustration 4.

Assume that a deposit to be made at year zero into an account that will earn 8% compounded annually. It is desired to withdraw Rs. 5,000 three years from now and Rs. 7,000 six years from now. What is the size of the year zero deposit that will produce these future payments.

Solution:

\[ PV = FV \times PVF(r,n) \]

\[ = Rs. 5,000 \times PVF(8\%, 3) + Rs 7,000 \times PVF(8\%, 6) \]

\[ = Rs. 5,000 \times (0.794) + Rs. 7,000 \times (0.630) \]

\[ = 3,970 + 4,410 = Rs. 8,380 \]

Illustration 5

Machine A costs Rs. 1,00,000 payable immediately. Machine B costs Rs. 1,20,000 half payable immediately and half payable in one year’s time. The expected cash receipts are:

<table>
<thead>
<tr>
<th>Year (at end)</th>
<th>Machine A (in Rs.)</th>
<th>Machine B (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20,000</td>
<td>60,000</td>
</tr>
<tr>
<td>2</td>
<td>60,000</td>
<td>60,000</td>
</tr>
<tr>
<td>3</td>
<td>40,000</td>
<td>80,000</td>
</tr>
<tr>
<td>4</td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20,000</td>
<td></td>
</tr>
</tbody>
</table>

At 7% opportunity cost, which machine should be selected on the basis of NPV?

Solution: Machine A

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash flow(Rs.)</th>
<th>PVF</th>
<th>PV(Rs.)</th>
<th>Cash flow(Rs.)</th>
<th>PVF</th>
<th>PV (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-1,00,000</td>
<td>1.000</td>
<td>-1,00,000</td>
<td>-60,000</td>
<td>-1.000</td>
<td>-60,000</td>
</tr>
<tr>
<td>1</td>
<td>20,000</td>
<td>0.935</td>
<td>18,700</td>
<td>-60,000</td>
<td>0.935</td>
<td>-56,100</td>
</tr>
<tr>
<td>2</td>
<td>60,000</td>
<td>0.873</td>
<td>52,380</td>
<td>60,000</td>
<td>0.873</td>
<td>52,380</td>
</tr>
<tr>
<td>3</td>
<td>40,000</td>
<td>0.816</td>
<td>32,640</td>
<td>80,000</td>
<td>0.816</td>
<td>48,960</td>
</tr>
<tr>
<td>4</td>
<td>30,000</td>
<td>0.763</td>
<td>22,890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20,000</td>
<td>0.713</td>
<td>14,260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPV</td>
<td></td>
<td>40,870</td>
<td></td>
<td></td>
<td></td>
<td>41,340</td>
</tr>
</tbody>
</table>

Machine B is having higher NPV and may be selected.

b) Capitalization of Earning Method

The capitalization method basically divides the business expected earnings by the so-called ‘capitalization rate’. The idea is that the business value is defined by the business earnings and the capitalization rate is used to relate the two. This method is more appropriate when it appears that a company’s current operations are indicative of its future operations, assuming of course, a normal growth rate. Under this method a stable
level of earnings is divided by a capitalization rate in order to arrive at an operating value for the entity. Where net earnings are being capitalized, the capitalization rate is the net earnings discount rate less the average sustainable growth rate.

\[
\text{(i) Value} = \frac{\text{Net Operating Income}}{\text{Capitalization Rate}}
\]

\[
\text{Capitalization Rate} = \text{Discount Rate} - \text{Growth Rate}
\]

**Illustration 6**

An investor wants to invest in an equity share of PKN Ltd. The company's last EPS was Rs. 50 per share and dividend payout ratio is 40%. The required rate of return from equity investment is 20%. Calculate the intrinsic value of equity if

(i) There is no growth in dividend.

(ii) Dividend are expected to grow at a constant rate of 18% p.a.

**Solution:**

We are given that EPS = Rs. 5

Dividend = 40%

So, last dividend (D0) = 40% of Rs. 5 = Rs. 20

(i) When there is no growth in dividend

So, D0 = D1 = Rs 20

\[
P_0 = \frac{D_1}{Ke}
\]

\[
= \frac{20}{0.20}
\]

\[
= Rs. 100
\]

Therefore, the intrinsic value is Rs. 100 when there is no growth in dividend.

(ii) When there is constant growth rate in dividend

\[
g = 18\%
\]

therefore, D1 = D0 (1+ g)

\[
= 20 (1 + 0.18)
\]

\[
= 23.6
\]

\[
P_0 = \frac{D_1}{Ke - g}
\]

\[
= \frac{23.6}{0.20 - 0.18}
\]

\[
= Rs. 1180
\]

Therefore, the intrinsic value is Rs. 1180, when there is constant growth of 18%.

**Illustration 7.**

Equity shares are currently selling at Rs. 60. The company is expected to pay a dividend of Rs. 3 with a growth rate of 8%. Find out the rate of return.
Solution:

P\(_0\) = Rs. 60

g = 8%

D\(_1\) = Rs. 3

\[
P\(_0\) = \frac{D\(_1\)}{K_e - g}
\]

\[
K_e = D\(_1\) / P\(_0\) + g
\]

= 0.05 + 0.08

= 0.13 or 13%

(ii) Cost of Debt

\[
K_d = (\text{int} \times (1-t))
\]

Where, \(K_d\) = Cost of Debt

\text{int} = \text{Average Interest Rate}

\(t\) = \text{Marginal rate of tax}

Illustration 8.

In Satija company, the value of 14\% Debentures is Rs. 60,00,000. Assume a tax rate is 50%. Compute the cost of debt.

Solution: \(K_d = (\text{int} \times (1-t))\)

= 14 (1-.5)

= 7%

(iii) DCF – Discounting Rate

Weighted Average Cost of Capital (WACC)

\(D\) = Debt

\(E\) = Equity

\(K_d\) = Post tax cost of debt

\(K_e\) = Cost of equity

Illustration 9.

Satija company has following capital structure:

- Equity Shares (4,00,000) Rs. 80,00,000
- 10\% Preference shares Rs. 20,00,000
- 14\% Debentures Rs. 60,00,000

The share of the company currently sells for Rs. 25. It is expected that the company will pay a dividend of Rs. 2 per share which will give a growth at 7\%. Tax rate is 50%. Calculate WACC.
Lesson 19  —  Valuation, Principles and Framework  515

Solution:

Cost of capital (c/c)

\[ K_d = \frac{\text{int} \times (1-t)}{K_e = \frac{D_1 + g}{P_0}} \]

= 14 \times (1-5 )

= 7%  

\[ K_e = \frac{D_1 + g}{P_0} = \frac{2 + 0.07}{25} = 0.08 + 0.07 = 15% \]

Kp = 10%

Calculation of WACC

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>Weight (W)</th>
<th>Specific c/c</th>
<th>W x c/c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Shares 10%</td>
<td>80,00,000</td>
<td>0.500</td>
<td>0.15</td>
<td>0.07500</td>
</tr>
<tr>
<td>Preference shares 14%</td>
<td>20,00,000</td>
<td>0.125</td>
<td>0.10</td>
<td>0.01250</td>
</tr>
<tr>
<td>Debentures</td>
<td>60,00,000</td>
<td>0.375</td>
<td>0.07</td>
<td>0.0265</td>
</tr>
<tr>
<td></td>
<td>1,60,00,000</td>
<td>0.375</td>
<td></td>
<td>0.11375</td>
</tr>
</tbody>
</table>

WAACC = 11.37%

Marginal Cost of Capital

In practice, the investment proposal may require funds to be raised from new internal/external sources thus, increasing the total funds also. When this happens, the cost of capital of additional funds is called Marginal Cost of Capital.

If the additional financing uses more than one source, say a combination of debt and preference share capital, then the WACC of new financing is called the Weighted Marginal Cost of Capital (WMCC).

Calculation of WMCC

(a) WMCC is calculated on the basis of market value weights because the new funds are to be raised at the market values.

(b) The specific cost of capital can be accurately calculated.

Illustration 10.

A firm wishes to raise funds upto Rs. 10,00,000 and finds that its WMCC depends upon the amount of funds raised. The firm has set pattern for financing, i.e., 75% shareholders funds and 25% debt. The shareholders funds may be taken as consisting of retained earnings and capital. The following cost for each source have been estimated at different levels of financing from that source.
Find out the WMCC at different breaking points given that

(i) the tax rate is 30%.
(ii) the retained earnings of Rs 1,50,000 will be provided by the current earnings at specific cost of capital of 12%.
(iii) additional needed shareholder funds will have to be raised by the issue of share capital.

Solution:

After tax specific cost of debt funds are:

7.15(1 - .3) = 5%
8.57(1 - .3) = 6%
11.43(1 - .3) = 8%

Percentage Composition of

Shareholders funds 75%
Bonds 25%

### Breaking points at different levels of each source

<table>
<thead>
<tr>
<th>Source</th>
<th>Amt(Rs.)</th>
<th>Weight</th>
<th>Break point(Rs.)</th>
<th>Total Funds(Rs.)</th>
<th>Specific c/c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder Funds</td>
<td>1,50,000</td>
<td>0.75</td>
<td>2,00,000</td>
<td>Upto 2,00,000</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>6,00,000</td>
<td>0.75</td>
<td>8,00,000</td>
<td>2,00,000 – 8,00,000</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>9,00,000</td>
<td>0.75</td>
<td>12,00,000</td>
<td>8,00,000 – 12,00,000</td>
<td>0.17</td>
</tr>
<tr>
<td>Bonds</td>
<td>1,00,000</td>
<td>0.25</td>
<td>4,00,000</td>
<td>Upto Rs 4,00,000</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>2,00,000</td>
<td>0.25</td>
<td>8,00,000</td>
<td>4,00,000 – 8,00,000</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>3,00,000</td>
<td>0.25</td>
<td>12,00,000</td>
<td>8,00,000 – 12,00,000</td>
<td>0.08</td>
</tr>
</tbody>
</table>
Calculation of WMCC

<table>
<thead>
<tr>
<th>Range (Rs.)</th>
<th>Source</th>
<th>Weight</th>
<th>C/C</th>
<th>Weight x c/c</th>
<th>WMCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto Rs 2,00,000</td>
<td>SH funds</td>
<td>0.75</td>
<td>0.12</td>
<td>0.0900</td>
<td>10.25%</td>
</tr>
<tr>
<td></td>
<td>Debt</td>
<td>0.25</td>
<td>0.05</td>
<td>0.0125</td>
<td>0.1025</td>
</tr>
<tr>
<td>2,00,000 – 4,00,000</td>
<td>SH funds</td>
<td>0.75</td>
<td>0.14</td>
<td>0.1050</td>
<td>11.75%</td>
</tr>
<tr>
<td></td>
<td>Debt</td>
<td>0.25</td>
<td>0.05</td>
<td>0.0125</td>
<td>0.1175</td>
</tr>
<tr>
<td>4,00,000 – 8,00,000</td>
<td>SH funds</td>
<td>0.75</td>
<td>0.14</td>
<td>0.1050</td>
<td>12.00%</td>
</tr>
<tr>
<td></td>
<td>Debt</td>
<td>0.25</td>
<td>0.06</td>
<td>0.0150</td>
<td>0.1200</td>
</tr>
<tr>
<td>8,00,000 – 12,00,000</td>
<td>SH funds</td>
<td>0.75</td>
<td>0.17</td>
<td>0.1275</td>
<td>14.75%</td>
</tr>
<tr>
<td></td>
<td>Debt</td>
<td>0.25</td>
<td>0.08</td>
<td>0.0200</td>
<td>0.1475</td>
</tr>
</tbody>
</table>

WMCC at different level of financing

<table>
<thead>
<tr>
<th>Levels of financing</th>
<th>WMCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto Rs 2,00,000</td>
<td>10.25%</td>
</tr>
<tr>
<td>2,00,000 – 4,00,000</td>
<td>11.75%</td>
</tr>
<tr>
<td>4,00,000 – 8,00,000</td>
<td>12.00%</td>
</tr>
<tr>
<td>8,00,000 -12,00,000</td>
<td>14.75%</td>
</tr>
</tbody>
</table>

WMCC AND NPV

WMCC can be effectively used in the calculation of NPV by analyzing WMCC in conjunction with the firm’s investment opportunities.

- A proposal may be considered desirable if its NPV discounted at WMCC is zero or positive.
- NPV under constant WMCC
  
  If a firm has constant WMCC, the different proposal may be evaluated on the basis of this WMCC. The proposal having highest NPV should be accepted.
- NPV and Increasing WMCC

  If the firm’s WMCC has break points over increasing levels of new financing, then determining the optimal capital budgeting procedure is a difficult task. As the firm increases the amount of investments, the return from the projects will decrease, since generally, the first project accepted has highest return, the next project selected will have next highest return and so on. In other words, the return on investment will decrease as the firm accepts more and more proposals. At the same time, the WMCC will increase because additional amount of new financing will be required. The firm would accept, therefore, the proposals upto the point where the WMCC is just equal to marginal return on investment. Beyond this point, the return will be less than the costs.
Illustration 11.

A firm finds break points in its WMCC at the following levels of new financing:

<table>
<thead>
<tr>
<th>Levels of Financing</th>
<th>WMCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs 12,00,000</td>
<td>10%</td>
</tr>
<tr>
<td>Rs 18,00,000</td>
<td>12%</td>
</tr>
<tr>
<td>Rs 28,00,000</td>
<td>16%</td>
</tr>
<tr>
<td>Rs 36,00,000</td>
<td>21%</td>
</tr>
</tbody>
</table>

Analyze the above and set the acceptance criteria for the selection of the proposals.

Solution:

The information given about the firm denotes that additional funds can be procured by the firm only at increasing WMCC. So, the firm has to decide as to which investment proposal be accepted and which are to be rejected.

In the first instance, the firm should evaluate the proposals which require funds upto Rs.12,00,000 only at the discount rate of 10%. Projects having positive NPV may be accepted. Then, it should proceed to evaluate those proposals which require funds upto Rs.18,00,000 at discount rate of 12% and so on.

Suppose the firm gets the following values of NPV at different financing constraints and different discount rates:

<table>
<thead>
<tr>
<th>Levels of financing</th>
<th>NPV (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12,00,000</td>
<td>5,00,000</td>
</tr>
<tr>
<td>18,00,000</td>
<td>9,00,000</td>
</tr>
<tr>
<td>28,00,000</td>
<td>15,00,000</td>
</tr>
<tr>
<td>36,00,000</td>
<td>13,00,000</td>
</tr>
</tbody>
</table>

So, the highest NPV of Rs.15,00,000 occurs when the firm accepts the proposal requiring funds of Rs. 28,00,000 and discounted at 16%. In the view of the objective of maximization of shareholders wealth, the optimal capital budgeting consists of the investment requiring funds upto Rs. 28,00,000 and returning a NPV of Rs. 15,00,000. The funds for these proposals may be raised at a specific cost of capital of 16%.

3. Market Based Approach

Market Approach refers to the notion of arriving at the value of a company by comparing it to the market value of similar publicly listed companies. The comparison is based on certain financial ratios or multiples, such as the price to book value, price to earnings and EV/EBITDA, of the equity in question to those of its peers. This type of approach, which is popular as a strategic tool in the financial industry, is mainly statistical, based on historical data, and current market sentiments. This is also known as relative valuation method.

A market approach is a method of determining the appraisal value of an asset based on the selling price of similar items. The market approach is a business valuation method that can be used to calculate the value of property or as part of the valuation process for a closely held business. Additionally, the market approach can be used to determine the value of a business ownership interest, security or intangible asset. Regardless of what asset is being valued, the market approach studies recent sales of similar assets, making adjustments for differences in size, quantity or quality.

a) Fair Market Value (FMV)

Fair Market Value (FMV) is, in its simplest expression, the price that a person reasonably interested in buying a given asset would pay to a person seriously interested in selling it for the purchase of the asset, or what the
asset would fetch in the marketplace. To establish FMV, it must be assumed that prospective buyers and sellers are reasonably knowledgeable about the asset, that they are behaving in their own best interests, that they are free of undue pressure to trade and that a reasonable time period is given for completing the transaction.

Book value is the price paid for a particular investment or asset. Fair market value, on the other hand, is the current price at which that same asset can be sold. Book value and fair market value can work together to help investors determine how much they stand to gain or lose by selling off assets.

One way analysts try to identify the fair market value for a company is with a metric called the P/E (price to earnings) ratio. P/E Ratio is one of the most widely used tools for stock selection. It is calculated by dividing the current market price of the stock by its earning per share (EPS). It shows the sum of money you are ready to pay for each rupee worth of the earnings of the company. PE = Market price / EPS.

\[
\text{Fair Value} = \text{Expected or Standard P/E} \times \text{Expected EPS}
\]

**Step 1**

Calculate the P/E ratio.

**Step 2**

Compare the P/E ratio for your company with other companies in the same industry. For instance, if you want to find the fair value for a bank, you must compare the P/E ratio to other P/E ratios in the banking industry.

**Step 3**

Interpret the meaning of the P/E ratio. A high P/E ratio means the company is overvalued and a low P/E ratio means the company is undervalued. For instance, if I own a company with a P/E ratio of 5 when the average P/E ratio for companies in the same industry is 3, I know that my stock is overvalued (more expensive).

**Step 4**

Adjust the stock price down to the average P/E ratio for the industry. If the average P/E ratio is 3, and the P/E ratio on my stock is 5 (current price Rs.10 / earnings per share Rs. 2), then I can use the P/E equation to find what the stock price would need to be in order to have a P/E ratio of 3. The equation is: New P/E ratio x Earnings per share. The answer is 3 x Rs. 2 or Rs. 6. The fair market value for this stock is Rs. 6, not Rs. 10.

**Illustration 12**

The expected EPS of a company for the current year is Rs. 6. In the industry the standard P/E ratio is 13 to 15. The company is in high growth stage. What is the best estimate of company’s share price? Should the share be purchased?

**Solution:**

Since the company is in growth stage, we can assume that the appropriate P/E ratio is 15.

Therefore,

Share price = 15 x 6 = Rs. 90

If the actual price is lower than Rs. 90, then the share should be purchased.

**Illustration 13**

You are given the following information about a company

Recent EPS = Rs. 1.89

Growth rate (constant) = 6%
Dividend payout ratio = 50%
Required rate of return = 10%

After five years, the expected P/E ratio is 12.5. Calculate

(i) The intrinsic value of share at present
(ii) The expected selling price of share at the end of 5th year
(iii) The maximum price at which the investor should buy this share

Solution:

(i) \( E_0 = 1.89 \)
\( g = 6\% \)
\( K_e = 10\% \)
\( b = 0.50 \)
\[ P_0 = \frac{E_1 (1-b)}{K_e - g} \]
\[ E_1 = E_0 (1 + g) \]
\[ = 1.89(1 + 0.06) \]
\[ = 2.0034 \]
\[ P_0 = \frac{2.0034 (1-0.50)}{0.10 - 0.06} \]
\[ = \text{Rs. 25.04} \]
Therefore, the intrinsic value is Rs. 25.04

(ii) The expected P/E ratio at the end of 5th year = 12.5
Expected selling price at the end of 5th year will be:
\[ P_5 = \frac{P/E \times EPS^6}{12.5 \times 1.89 (1 + 0.06)^6} \]
\[ = 33.45 \]

(iii) The maximum price an investor will be willing to pay would be the intrinsic value of this share, i.e., Rs. 25.04

Illustration 14. A firm is currently paying a dividend of Rs. 2 per share. The rate of dividend is expected to grow at 5% for first five years and 10% thereafter. Find the value of share if the required rate of return is 15%.

Solution:

It must be noted that the annual dividends are paid after the close of the accounting year. Therefore, dividend just paid are Do, i.e., in the beginning of the current year.

Do = Rs. 2
\( g = 5\% \text{ p.a for first five years} \)
\[ D_1 = 2(1+0.05) = \text{Rs. 2.10} \]
Similarly, D2, D3, D4, D5 can be calculated
Dividends for first five years are:

<table>
<thead>
<tr>
<th>Dividend</th>
<th>PVF (15%, n)</th>
<th>PV of dividend</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>0.87</td>
<td>1.83</td>
</tr>
<tr>
<td>2.21</td>
<td>0.756</td>
<td>1.67</td>
</tr>
<tr>
<td>2.32</td>
<td>0.658</td>
<td>1.53</td>
</tr>
<tr>
<td>2.43</td>
<td>0.572</td>
<td>1.39</td>
</tr>
<tr>
<td>2.55</td>
<td>0.497</td>
<td>1.27</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7.69</td>
</tr>
</tbody>
</table>

Now it is given that \( g = 10\% \) from 6th year onwards

Therefore, \( D_6 = 2.55 \times (1 + 0.10) = \text{Rs} \ 2.81 \)

Present value of \( P_5 = D_6 \times \text{PVF} \)

\[
= \frac{2.81}{0.15 - 0.10} \times 0.497 \\
= 27.88
\]

Intrinsic Value (\( P_0 \)) = PV of dividend in 5 years + PV of \( P_5 \)

\[
= 7.69 + 27.88 \\
= \text{Rs} \ 35.57
\]

Illustration 15.

Darwin Ltd has the following details

- ROE = 15\%
- Expected EPS = \text{Rs} \ 5
- Expected DPS = \text{Rs} \ 2
- Required rate of return = 10\% p.a

As a financial advisor, you are required to calculate its expected growth rate, its price, P/E ratio.

Solution:

- EPS1 = \text{Rs} \ 5
- DPS1 = \text{Rs} \ 2
- Retention ratio = 60\% (3/5)
- \( r = 15\% \)
- \( g = br = 0.60 \times (0.15) = 0.09 \)
- \( Ke = 10\% \)
- \( P_0 = \frac{2}{(0.10 - 0.09)} = \text{Rs} \ 200 \)

Now its P/E ratio is calculated below:

\[
P/E \text{ ratio} = \frac{\text{Price}}{\text{EPS} \ 1} \\
= \frac{200}{5} = 40
\]
**Indian Accounting Standard (abbreviated as Ind-AS)** are the Accounting standards adopted by companies in India and issued under the supervision and control of Accounting Standards Board (ASB), which was constituted as a body in the year 1977. ASB is a committee under the Institute of Chartered Accountants of India (ICAI) which consists of representatives from government department, academicians, other professional bodies viz. ICAI, representatives from ASSOCHAM, CII, FICCI, etc., while formulating the accounting standards, ASB will give due consideration to standards issued by IASC and try to integrate them to the extent possible, in the light of the conditions and practices prevailing in India.

The Ind-AS are named and numbered in the same way as the corresponding International Financial Reporting Standards (IFRS). National Advisory Committee on Accounting Standards (NACAS) recommend these standards to the Ministry of Corporate Affairs (MCA). MCA has to spell out the accounting standards applicable for companies in India.

**Procedures for Issuing Accounting Standards**

Following is the procedure adopted by ASB for issuing Accounting Standards:

(a) ASB determines the broad areas requiring formulation of Accounting Standards and list them according to priority.

(b) An exposure draft is prepared with the help of a study group constituted for this purpose. Views of government, public sector undertakings, industry and other organizations are also obtained before formulating the Exposure Draft (ED).

(c) ED comprises the following:

   (i) A statement of concepts and fundamental accounting principles relating to the standard.

   (ii) Definition of the terms used in the standards.

   (iii) The manner in which the accounting principles have been applied for formulating the standard.

   (iv) The presentations and disclosures requirements in complying with the standard.

   (v) Class of enterprises to which the standard will apply.

   (vi) Date from which the standard will be effective.

(d) The Exposure Draft will be published in the professional journals and circulated otherwise to obtain views and comments. ASB after revising the standards submits the same to the council.

(e) The council will consider and, if necessary, amend the standards after consulting the ASB, then in its final form the council issues the standard under its authority.

**IND AS VALUATION**

**IAS 33 EARNING PER SHARE**

**Objective and Scope**

- Amount of earnings that are attributable to each common or ordinary shareholder is represented by Earning Per Share (EPS) number.

- Standard seeks to provide guidance on:
  - How earnings per share should be accounted for.
– When diluted EPS should be presented.
– What information should be disclosed.

• Fairly complex calculations:
  – IASB has provided numerous illustrative examples that accompany but are not part of the standard.

• Ordinary Shares:
  – Equity instruments that are subordinate to all other classes of equity instruments.
  – Also referred to as common shares.

• The EPS calculations focus on these shares as they are residual in nature:
  – Ordinary or common shareholders share in the residual earnings after operating expenses and dividends on preferred shares.

• IAS 33 covers financial statements of:
  – Entities that have ordinary shares or potential ordinary shares traded in public market.
  – Entities that are in the process of filing their statements with a securities commission for the purpose of going public.

• Potential Ordinary shares:
  – Financial instruments (or other contracts) that may entitle the holder to ordinary shares.
  – Convertible debt, convertible preferred shares, options, warrants and contingent issuable shares.

• Contingently issuable shares:
  – Issuable under the terms of contingent share agreement.
  – Shares that will be issued for little or no cash when certain conditions in the agreement are met.

• EPS is calculated and presented:
  – If there are numerous public shareholders.
  – If the entity files financial statements with a securities regulator.
  – Only in the consolidated statements when non-consolidated are prepared as well.

**Measurement**

• Two types of EPS:
  – Basic EPS (Based on existing earnings and outstanding common / ordinary shares) Diluted EPS.

• Basic EPS is calculated as follows:
  – The profit or loss attributable to ordinary shareholders is divided by the weighted average number of ordinary shares outstanding.
  – The calculation should also be done for income from continuing operations as well (if presented in the P & L Statement).

• Earnings
  Profit or loss attributable to ordinary shareholders begins with:
  – Profit or loss from continuing operations
  – Profit or loss
Adjustment to earnings

- Dividends on preferred shares:
  Only declared dividends relating to non-cumulative preferred shares are deducted and dividends (declared or not) relating to cumulative preferred shares are deducted.

- Gains / losses on settlement / repurchase / early conversion of preferred shares.

- After tax interest on loan or debentures.

- Discount / premium/ amortization.

- No adjustment is made to numerator for options and warrants.

  - The entity must determine whether potential common shares are dilutive or anti-dilutive.

    Potential common shares that results in lower Dilutive EPS are referred to as dilutive and included in the calculation of DEPS; whereas potential common shares that would result in Dilutive EPS higher than Basic EPS are referred to as anti – dilutive and not included in the calculation or final reported DEPS.

  - Written call options / Warrants:

    When the entity writes a call option or issues a warrant, then it gives the holder the right to buy or obtain shares in a predetermined price (Exercise price) and when that price is lower than the market price, option is said to be “in the money” and will be an incentive for the holder to exercise the option and it would be dilutive to the company.

  - Written put options and forward purchase contracts:

    When a entity writes a put option or enters into a forward contract to sell shares, given the holder the right to sell the shares to the entity at exercise price (Exercise price) and when the price is higher than the market price, option is said to be “in the money” and will be an incentive to exercise the option and sell the share to the entity at higher price.

  - Convertible instruments:

    Convertible instruments are included in DEPS calculation when dilutive. But convertible preferred shares are assumed to be anti-dilutive if the related dividend per ordinary share is greater than BEPS. Convertible debt is considered to be anti – dilutive whenever the after tax interest per ordinary share is greater than BEPS.

  - Contingently issuable shares:

    These are included from the beginning of the period if the following conditions are satisfied by year end. The conditions relate to

    - Earning levels
    - Share prices
    - Other factors such as store openings

    If the conditions are not satisfied by the year end, the calculation is based on the number of shares that would be issued if the end of the current period were the end of the evaluation period.

  - Retrospective adjustments:

    When the number of shares increases during or after the reporting period but before the statements are authorized for issue, all EPS numbers are adjusted.
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- Presentation:
  - The entity must disclose the EPS numbers in the statement of comprehensive income.
  - If a separate profit & loss statement is prepared, the EPS numbers are presented there.
  - If discontinued operations are reported, the BEPS and DEPS for discontinued operations may be presented on the statement of comprehensive income or the notes.

IND AS 32 FINANCIAL INSTRUMENT PRESENTATION

What is Financial Instrument?

It can be a financial liability or an equity instrument. If it is an equity instrument then:

(a) It does not have any contractual obligation.

(b) It is either a non-derivative and if it is derivative, it is to be settled either in cash or by an asset for the fixed number of entity’s own equity instruments.

In a situation, where an entity can exchange its own equity instruments to receive or deliver shares, then this arrangement/contract is not an equity instrument but a financial asset or financial liability.

Scope

This standard is applicable to all financial instruments except:

- Subsidiaries, joint ventures, associates, etc.
- Employees’ benefits
- Insurance contracts
- Instruments where share-based payments are involved
- The standard applies to contracts to buy or sell non-financial instruments which can be settled in cash by some other financial instruments
- When a contract is readily convertible in cash
- A written option can only be settled in cash not otherwise.

Presentations

- The issuer of a financial instrument will classify the instrument either as an asset or as an equity instrument

- Under certain conditions, an issuer will define an equity instrument if it has no contractual obligations to deliver cash or financial asset of other entity or to exchange any assets / liabilities under favourable conditions. If the instrument is to settled with the issuer’s own equity instrument then it is a non – derivative that includes no contractual obligation to deliver the entity’s own equity, or if it is a derivative it would require settlement with a fixed amount of cash or a fixed number of shares of the entity.

Puttable Instruments

- These include contractual obligations for the issuer to repurchase or redeem instruments for cash or other financial asset when sold.

- If an instrument entitles the holder to a pro-rata share after payment of all liabilities on liquidation, the instrument is subordinate to all other instruments. A subordinate instrument has no priority over
other claims to the assets. All subordinate instruments are puttable, and the formula to calculate the
redemption price is the same in that class.

- Puttable instruments do not have any obligations apart from the contractual obligations by the issuer.

**Settlement with Entity’s Own Shares**

In a settlement if an entity receives its own shares, then it is a financial asset or financial liability contract:

- It is a financial liability when the entity has to buy back its own shares for cash.
- A contract that requires delivery of an entity’s own shares in exchange for cash or another asset, it is a
  financial asset.

**Contingent Settlement Provisions**

A contingent settlement requires a financial instrument to deliver cash or another financial asset on the
happening of a certain event in the future which will render the instrument as a financial liability. Such events
are beyond the control of the entity.

**Interest, Dividends, Gains and Losses**

- Interest, dividends, gains and losses relating to a financial instrument or a component which is a
  financial liability, shall be recognized in the P & L statement.
- Any dividend distributions to the holder of financial instruments long with any transaction costs shall be
directly debited to equity, net of any income tax benefits.
- The issue cost of equity should be deducted from equity. These costs are typically legal, like accounting,
etc.
- If dividends are classified as an expense, it should be presented in the statement of comprehensive
  income.
- The requirement of IAS 1 and IFRS 7 are to be complied with.

**Offsetting a Financial Asset and a Financial Liability**

A financial asset and a financial liability shall be set off and the net amount shall be presented in the financial
statements under the following circumstances:

(a) There is a legal enforceable right of set off.
(b) The entity wants to settle on net basis or wants to realize asset and settle liability simultaneously.

But, if the transfer of an asset does not qualify for re-recognition, then the set off of asset and liability do not
take place.

This standard requires a set off when doing so presents the future cash flows after settling two or three
instruments.

Offsetting assets with liabilities is inappropriate when:

(a) Several instruments are used to emulate one instrument.
(b) Financial assets and liabilities have same primary risk exposure.
(c) Financial assets are pledged.
(d) Assets are set aside in trust.
(e) Obligations arising under an insurance contract.
Objectives

1. To determine Fair Value.
2. To set out a single Ind AS framework for measuring fair value.
3. To require disclosures with respect to fair value measurements.

Scope

This Ind AS applies when another Ind AS requires or permits fair value measurements or disclosures about fair value measurements.

Exclusion

This Ind-AS does not apply to the following:

1. Share-based payment transaction as per Ind AS 102
2. Leasing transactions within as per Ind AS 47, and
3. Measurements that have some similarities to fair value but are not fair value, such as net realisable value (NRV) in Ind AS 2, Inventories, or value in use in Ind AS 36, Impairment of Assets.

Fair Value Measurement

(a) Definition of Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

(b) Fair Value Measurement – Approach

Ind AS 113 states that fair value measurement requires an entity to determine all of the following:

- **Asset/Liability:** The particular asset/liability that is subject to measurement maybe either a stand-alone asset/liability or a group of assets / group of liabilities / group of assets and liabilities.
- **Principal / Most advantageous market:** The principal (or most advantageous market) for the asset or liability.
- **Non-financial assets:** For a non-financial asset, the valuation premise that is appropriate for measurement (consistent with its highest and best use).

(c) Valuation Techniques

The valuation techniques consider the availability of data to develop inputs, and the level of the fair value hierarchy within which the inputs are categorized.

Principal Market Vs Most Advantageous Market

A fair value measurement assumes that the transaction to sell asset or transfer a liability takes place either:

- In the principal market of an asset or liability, or
- In the absence of the principal market, the most advantageous market of asset or liability

Principal market is the market with the greatest volume and the highest level of activity for the asset or liability. Different entities can have different principal markets as the access of an entity to some market can be restricted.
The most advantageous market is the market that maximizes the amount that would be received to sell the asset, or minimizes the amount that would be paid to transfer the liability.

(d) Fair Value Measurement – Valuation Techniques

(i) Market Approach

- Market Multiples similar publicly listed companies (Revenue, EBITDA, EBIT, Price to Book, etc. adjusted for differences in growth, risk and profitability)
- Guideline Transactions in the market in the same industry as the subject Company

(ii) Cost Approach

- Reflects the amount that would be required to replace the service capacity of an asset.
- For Non-financial assets=Current Replacement Cost + Obsolescence

(iii) Income Approach

- Present Value Techniques (e.g. Discounted Cash Flow Method when valuing a business)
- Option Pricing Models (e.g. Black Scholes, Monte Carlo Simulation and Binomial models in valuing ESOP or put/call options).
- Multi-Period Excess Earnings Method (e.g. Valuing the primary intangible asset in the business)
- Relief-from-royalty Method (e.g. Valuing Brand or IP)
- With-and-without Method (e.g. Valuing Non-Compete agreements)

Fair Value Measurement – Fair Value Hierarchy

IND AS 113 establishes a fair value hierarchy that transfers inputs to valuation techniques in 3 levels.

(i) Input Level 3 (unobservable)

Inputs that reflect management’s own assumptions about the assumptions that a market participant would make (E.g. Projected cash flows used to value a business or non-controlling interest in an unlisted entity)

(ii) Input Level 2 (Indirectly observable)

- Prices in active markets for similar assets / liabilities, quoted prices for identical / similar items in markets that are not active
- Inputs other than quoted prices (e.g. – interest rates, yield curve)

(iii) Input Level 1 (Directly observable)

Quoted prices in active markets for identical assets / liabilities (e.g. Quoted prices for an equity security on the BSE/ NSE).

Disclosures In Financial Statements

An entity shall disclose information that helps users of its financial statements assess both of the following:

(a) For assets and liabilities that are measured at fair value on a recurring or non-recurring basis in the balance sheet after initial recognition, the valuation techniques are used to develop those measurements.

(b) For recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income for the period.
Lesson Round Up

- Corporate valuations form the basis of corporate finance activity including capital raising, M&A and also to meet regulatory / accounting requirements or for voluntary purpose.
- Business Valuation is the process of determining the “Economic Worth” of a company based on its Business Model under certain assumptions and limiting condition and subject to data available on the valuation date.
- The Indian Capital Market follows a free-pricing regime and thus the accurate pricing of an IPO is of immense importance.
- There are broadly three approaches to valuation: Asset approach, Income approach, Market approach
- The adjusted net asset method is commonly used for estimating the value of the business.
- Net asset value is useful for shares valuation in sectors where the company value comes from the held assets rather than the stream of profit that was generated by the company business.
- The Income-based method of valuations is based on the premise that the current value of any business is a function of the future value that an investor can expect to receive from purchasing all or part of the business.
- If the additional financing uses more than one source, say a combination of debt and preference share capital, the WACC of new financing is called the Weighted Marginal Cost of Capital (WMCC)
- WMCC can be effectively used in the calculation of NPV by analyzing WMCC in conjunction with the firm’s investment opportunities.
- A market approach is a method of determining the appraisal value of an asset based on the selling price of similar items. The market approach is a business valuation method that can be used to calculate the value of property or as part of the valuation process for a closely held business.
- Indian Accounting Standard (abbreviated as Ind-AS) is the accounting standard adopted by companies in India and issued under the supervision and control of Accounting Standards Board (ASB), which was constituted as a body in the year 1977.

Self Test Questions

1. Explain the areas where valuation is required.
2. Write short notes on
   (a) IAS 113
   (b) Fair Market Value
   (c) Relation between WMCC and NPV
3. Critically examine the earning approach to cost of equity share capital.
4. Explain Book value vs. Market value weights in cost of capital.
5. “Individuals do have a time preference for money”. State the reasons for such a preference.
6. Calculate cost of capital in each of the following cases:
   (i) A 7 year Rs 100 bond of a firm can be sold for a net price of Rs 97.75 and is redeemable at a premium of 5%. The coupon rate of interest is 15% and tax rate is 55%.
   (ii) A company issues 10% irredeemable preference shares of Rs 105 (FV = 100)
(iii) The current market value of a share is Rs 90 and the expected dividend at the end of current year is Rs 4.50 with a growth rate of 8%.

(Ans (i) 7.74% (ii) 9.52% (iii) 13%)

7. What is the present value of cash flow of Rs 750 per year forever?
   (a) At an interest rate of 8%?
   (b) At an interest rate of 10%?

(Ans (a) Rs 9375 (b) Rs 7500)

8. The ABC company has the total capital structure of Rs 80,00,000 consisting of:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary shares (2,00,000 shares)</td>
<td>50%</td>
</tr>
<tr>
<td>10% Preference Shares</td>
<td>12.5%</td>
</tr>
<tr>
<td>14% Debentures</td>
<td>37.5%</td>
</tr>
</tbody>
</table>

The shares of the company sells for Rs 20. It is expected that company will pay next year the dividend of Rs 2 per share which will grow at 7% forever. Tax rate 50%. You are required to:

(a) Compute a weighted average cost of capital based on existing capital structure:

(b) Compute the new weighted average cost of capital if the company raises an additional Rs 20,00,000 debt by issuing 15% debentures. This would result in increasing the expected dividend to Rs 3 and leave the growth rate unchanged, but the price of the share fall to Rs 15 per share.

(c) Compute the weighted average cost of capital if in (b) above, the growth rate increases to 10%.

(Ans: (a) 17% (b) 15.4% (c) 27%)
Lesson 20

Valuation of Shares, Business and Intangible Assets

LESSON OUTLINE

- Need for Valuation
- Methods of Valuation of Shares
  Net Asset Method
  Earning Basis
  Fair Value of Preference Shares
- Valuation of Business
  Asset Approach
  Earning Value Approach
  Market Value Approach
- Valuation of Intangible Asset
- Meaning of Goodwill
- Methods of Valuation of Goodwill
- Regulatory Valuation
  SEBI
  FEMA
  Income Tax Act
  Companies Act
  RBI
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

Valuation of shares has to be done by the accountant by adopting a sound and reasonable basis. Various tax laws make specific provisions regarding the valuation of shares and lay down either the general principles or the exact procedures to be followed. Many regulatory authorities, i.e., RBI, SEBI, FEMA play a vital role for valuation of shares as well as intangible assets and assist the same. There are different methods for valuation depending upon the market conditions, rate of return and laws applicable from time to time. After studying this lesson, you will be able to understand

- Need for valuation
- Different methods for valuation of shares
- Different methods for valuation of goodwill
- Internally generated goodwill
- Methods for valuation of business
- Role of different regulatory authorities in valuation
NEED FOR VALUATION

The necessity for valuation arises for statutory as well as commercial reasons:

(i) Assessment under wealth tax act, gift tax act
(ii) Formulation of scheme for amalgamation
(iii) Purchase and sale of shares of private companies
(iv) Raising loan on the security of shares
(v) For paying court fees
(vi) Conversion of shares
(vii) Purchase of block of shares for the purpose of acquiring interest or otherwise in another company
(viii) Purchase of shares by the employees of the company where retention of such shares is limited to the period of their employment
(ix) Compensation to the shareholders by the government under a scheme of nationalization
(x) Acquisition of shares of dissentient shareholders under a scheme of reconstruction.

Normally a stock exchange is the most common source of ascertaining the value of shares especially for transactions involving small block of shares which are quoted on stock exchanges. But stock exchange prices form an unreliable basis because prices on a particular day are generally determined on the basis of demand and supply which are influenced by factors outside the business.

The wide fluctuations in prices of shares at the stock exchange are the outcome of actions and opinions of the private and institutional investors all over the country and indeed the world.

Thus the valuation of shares has to be done by the accountant by adopting sound and reasonable basis. Various tax laws make specific provisions regarding the valuation of shares and lay down either the general principles or the exact procedures to be followed.

Factors Affecting Valuation of Shares

The principle factors which have to be taken into consideration for valuing the shares of a joint stock company are:

1. Earnings or profitability and stability of profits
2. The yield or returns from other similar companies
3. The dividend policy of the company
4. Unfavourable financial ratios
5. Net assets position
6. Capital employed
7. The size of the block of the shares to be valued
8. Policy of the government

METHODS OF VALUATION OF SHARES

There are two principal methods of valuation of shares:
Methods of Valuation of Shares

- **Net Assets Method**
- **Earning Basis Method**

### NET ASSET METHOD

Valuation of shares on net asset basis is also called asset backing or intrinsic value or break up value method. Under this method, the value per share is arrived at by valuing the assets of the company and deducting all liabilities and claims of the preferred shareholders and dividing the net assets by total equity shares with the same paid up value. Unless otherwise stated, goodwill is included in net assets.

In all cases of valuation on assets bases on, except those based on book value basis, it is important to arrive at current replacement and realization value. It is more so in case of assets like patents, trade marks, know-how, etc., which may possess values substantially more or less than those shown in the books.

The mechanism of asset valuation is simple:

(i) Arrive at the current replacement costs of assets for valuation based on appraisal or, in the case of a firm which is not a going concern, determine the net realizable value for break up valuation and deduct there from all liabilities in the books of account and such other liabilities which have not been recorded but are likely to rank for payment, and the amount payable to preferred shareholders. The approach should be conservative. Under provision for taxation, liabilities on account of gratuities, arrears of preference dividends, etc., are instances of what may not appear in books.

(ii) If circumstances suggest existence of goodwill from a study of the profit record, particular advantages, etc., the same should be evaluated with reference to any method appropriate for the purpose for addition to the result obtained in (i) above.

(iii) The result, as arrived at, shall represent the asset value for the whole undertaking; to arrive at value per share, the same should be divided by the number of equity shares in the company, provided all shares are equally paid up. If the company has equity shares of varying fully paid-up values, the total value should first be allocated to the different paid-up value groups and each such allocation would be divided by the number of shares in each of such groups.

### The Net Asset Method may be written as follow :

<table>
<thead>
<tr>
<th>Description</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Realizable value of assets</td>
<td>xx</td>
</tr>
<tr>
<td>Less: Total amount payable to outside liabilities</td>
<td>xx</td>
</tr>
<tr>
<td>BALANCE</td>
<td>xx</td>
</tr>
<tr>
<td>Less: Preference Share Capital (Paid-up value)</td>
<td>xx</td>
</tr>
<tr>
<td>Balance available for Equity Shareholders</td>
<td>xx</td>
</tr>
<tr>
<td>Valuation per Equity Share = Balance available for Equity Shareholders</td>
<td>No. of Equity Shares with same paid up value</td>
</tr>
</tbody>
</table>

Alternatively, the valuation of equity shares by the net asset method can also be arrived at as follows:

**Add:** Reserves
Other surpluses
Profit on revaluation

**Gross Equity**

**Less**: Loss on revaluation
Miscellaneous expenditure
Accumulated losses

**Net Equity**

\[
\text{Valuation per Equity Share} = \frac{\text{Net Equity}}{\text{No. of Equity Shares}}
\]

**Illustration 1.**

The following particulars are available in relation to X Ltd.

(i) Capital: 4500, 8% Preference shares of Rs 100 each fully paid and 50,000 equity shares of Rs. 10 each fully paid
(ii) External liabilities: 50,000
(iii) Reserves and Surplus: Rs. 50,000
(iv) The average expected profit (after taxation) earned by the company: Rs. 1,05,000
(v) The normal profit earned on the market value of equity shares (fully paid) of the same type of companies is 10%
(vi) 10% of the profits after tax is transferred to reserves.

Calculate the intrinsic value per equity share and value per share according to dividend yield basis. Assume that out of total assets, Rs. 4,000 worth of assets are fictitious.

**Solution:**

(i) **Intrinsic value of shares**

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference share capital</td>
<td>4,50,000</td>
</tr>
<tr>
<td>Equity share capital</td>
<td>5,00,000</td>
</tr>
<tr>
<td>Reserves and surplus</td>
<td>50,000</td>
</tr>
<tr>
<td>External liabilities</td>
<td>85,000</td>
</tr>
</tbody>
</table>

Total: 10,85,000

Less: Fictitious Assets

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>External liabilities</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Total: 9,96,000

Less: Preference share capital

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets available for equity shareholders</td>
<td>4,50,000</td>
</tr>
</tbody>
</table>

Intrinsic value per share = \( \frac{5,46,000}{50,000} \) = Rs. 10.92
(ii) **Dividend Yield Basis**

Average profit after tax  
1,05,000

Less: transfer to reserve  
10,500

Dividend on preference shares  
36,000

Profits available for equity shareholders  
58,500

Rate of dividend  
\[
\frac{58,500}{5,00,000} \times 100 = 11.7\%
\]

Value per Equity share  
\[
\frac{11.7}{10} \times 10 = Rs. 11.70
\]

**EARNING BASIS**

In most of the cases, the investor is interested in the earnings of the company since the business enterprise is accepted as a going concern. The earning basis of share valuation is expressed through:

(i) Yield method or Dividend yield method

(ii) Earning Capacity method

**Valuation based on Rate of Dividend**

This method of valuation is suitable for small blocks of shares because small shareholders are usually interested in dividends. The value of a share according to this method is ascertained as follows:

\[
\text{Value of share} = \frac{\text{Possible rate of dividend}}{\text{Normal rate of dividend}} \times \text{Paid up value per share}
\]

OR

\[
\text{Value of share} = \frac{\text{Dividend (in rupees) per share}}{\text{Normal rate of dividend}} \times 100
\]

Possible rate of dividend  
\[
\frac{\text{Total profit available for dividend}}{\text{Total paid up equity capital}} \times 100
\]

In other words, dividend on equity shares should be calculated by deducting from the maintainable profits:

(i) taxation;

(ii) transfers to reserve;

(iii) transfers to debenture redemption fund;

(iv) preference dividend, and by dividing the remaining by the number of shares.

**Valuation based on Rate of Earning**

This method of valuation of shares is suitable for valuing large block of company’s shares because they are more interested in company’s earnings rather than what the company distributes in the form of dividends. The value of a share on this basis can be calculated as follows:
Value of share = \( \frac{\text{Rate of Earning}}{\text{Normal Rate Of Earning}} \times \text{Paid-up Value per Share} \)

Rate of earning = \( \frac{\text{Actual Profit Earned}}{\text{Capital Employed}} \times 100 \)

Rate of earning is calculated by taking into account the total capital employed including long-term borrowings.

Since the total capital is taken into account, the profit figure should be before debenture interest, preference dividend, but after income tax. This is quite appropriate when the dividend is much more than the rate of earning on capital.

**Valuation based on price earning ratio:** This method is suitable for ascertaining the market value of shares which are quoted on a recognized stock exchange. According to this method, the shares are valued on the basis of earning per share multiplied by price earning ratio. Thus,

\[
\text{Market Value of Share} = \text{Price Earning Ratio} \times \text{Earning Per Share}
\]

\[
\text{Earning Per Share} = \frac{\text{Profit available for equity shareholders}}{\text{Number of Equity Shares}}
\]

\[
\text{Price Earning Ratio} = \frac{\text{Market value per share}}{\text{Earning Per Share}}
\]

**CAPITALIZATION FACTOR:** The value of a share according to yield basis can also be ascertained by finding out the capitalization factor or the multiplier. The capitalization factor will be ascertained by dividing 100 by the normal rate of return.

\[
\text{Capitalization Factor} = \frac{100}{\text{Normal Rate of Return}}
\]

The profit available is capitalized by multiplying it with the capitalization factor. The value of equity share is obtained by dividing the capitalized value by the number of equity shares.

**FAIR VALUE OF SHARES**

The fair value of shares can be calculated by using the following formula:

\[
\text{Fair Value of Share} = \frac{\text{Value by Net Asset Method} + \text{Value by Yield Method}}{2}
\]

This method is also known as dual method of share valuation. This method attempts to minimize the demerits of both the methods. This is, of course, no valuation but a compromised formula for bringing the parties to an agreement. However, it is recognized in the government circles for valuing shares of investment companies for wealth tax purposes.

**VALUATION OF PREFERENCE SHARES**

The yield-based valuation of preference shares would hold good only if:

(i) the dividend on the share has been paid regularly, and it is reasonably expected that it would continue to be paid; and
(ii) that investment is adjudged by the criteria that the total assets of the concern are equal to 4 or 5 times the preference capital.

Preference shares may have certain additional rights. For example, the right to get an additional share of profits or the right to get the share converted into equity shares at a certain rate. The right to get an additional share of profit will probably increase the market value of the share depending upon the size of the total profit and the conditions under which the additional dividend will come to preference share holders. Total yield per share will have to be worked out and on that basis the market value will be ascertained by the formula:

\[
\frac{\text{Total Yield Per Share}}{\text{Normal Rate of Yield}} \times 100
\]

Illustration 2.

Diamond Limited

Balance Sheet as at 31st March, 2014

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Note No.</th>
<th>Amount as at 31st March, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. EQUITY AND LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Shareholders’ funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Share Capital</td>
<td></td>
<td>2,00,000</td>
</tr>
<tr>
<td>(b) Reseve and Surplus</td>
<td>1</td>
<td>72,000</td>
</tr>
<tr>
<td>(2) Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Trade payable</td>
<td></td>
<td>1,28,000</td>
</tr>
<tr>
<td>(b) Provision for Income Tax</td>
<td></td>
<td>60,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>4,60,000</td>
</tr>
<tr>
<td><strong>II. ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Fixed Assets</td>
<td>2</td>
<td>2,60,000</td>
</tr>
<tr>
<td>(b) Preliminary expenses</td>
<td>2</td>
<td>12,000</td>
</tr>
<tr>
<td>(2) Current Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Inventories</td>
<td></td>
<td>48,000</td>
</tr>
<tr>
<td>(b) Trade receivable</td>
<td></td>
<td>88,000</td>
</tr>
<tr>
<td>(c) Cash at bank</td>
<td></td>
<td>52,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>4,60,000</td>
</tr>
</tbody>
</table>
Note No. 1.

Reserve and Surplus

General reserve 40,000
Profit and loss account 32,000

72,000

Note No. 2.

Fixed Assets

Land and buildings 1,10,000
Plant and machinery 1,30,000
Patents 20,000

2,60,000

The expert valuer valued the Land and Buildings at Rs. 2,40,000; Goodwill at Rs. 1,60,000; and Plant and Machinery at Rs. 1,20,000. Out of the total debtors, it is found that Debtors of Rs. 8,000 are bad. The profits of the company have been as follows:

Rs.
31.3.2012 92,000
31.3.2013 88,000
31.3.2014 96,000

The company follows the practice of transferring 25% of profits to General Reserve. Similar type of companies earn at 10% of the value of their shares. Ascertain the value of shares of the company under:

(i) intrinsic value method;
(ii) yield value method; and
(iii) fair value method.

Solution:

Diamond Ltd.

Valuation of shares

(i) Intrinsic Value Method

Assets:

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and Buildings</td>
<td>2,40,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>1,60,000</td>
</tr>
<tr>
<td>Plant and Machinery</td>
<td>1,20,000</td>
</tr>
<tr>
<td>Patents and Trade Marks</td>
<td>20,000</td>
</tr>
<tr>
<td>Stock</td>
<td>48,000</td>
</tr>
<tr>
<td>Debtors less bad debts</td>
<td>80,000</td>
</tr>
<tr>
<td>Bank Balance</td>
<td>52,000</td>
</tr>
<tr>
<td></td>
<td>7,20,000</td>
</tr>
</tbody>
</table>
Lesson 20  Valuation of Shares, Business and Intangible Assets  539

Less: Liabilities:
Sundry creditors  1,28,000
Net assets  5,92,000
Intrinsic value of shares (each share) = \( \frac{\text{Net Assets}}{\text{No. of shares}} \)
\[ \frac{5,92,000}{20,000} = 29.60 \]

(ii) Yield Value Method
Rs.
Total profit of last three years  2,76,000
Less: Bad debts  8,000
2,68,000
Average profit = \( \frac{2,68,000}{3} \) = 89,333

Add: Decrease in depreciation on Plant and Machinery say @ 15% on Rs 10,000 1,500
Less: Increase in depreciation on land and building say @ 10% on Rs 1,30,000 {10% of (240000 – 110000)} 13,000
Average profit  77,833
Less: Transfer to Reserve @ 25% of 77,833 19,458
Profit available for Dividend  58,375
Rate of Dividend = \( \frac{58,375 \times 100}{2,00,000} \) = 29.187%

Yield value of each share = \( \frac{\text{Rate of Dividend}}{\text{Normal Rate of Return}} \times \text{Paid-up value of each share} \)
\[ = \frac{29.187}{10} = \text{Rs. } 29.19 \]

(iii) Fair Value Method

Fair value of each share = \( \frac{\text{Intrinsic value} + \text{Yield Value}}{2} \)
\[ = \frac{29.60 + 29.19}{2} \]
\[ = \text{Rs } 29.40 \]

Illustration 3.
The Balance Sheet of RNR Limited as on 31.12.2017 is as follows:
Fixed assets are worth Rs. 24 lakhs. Other Tangible assets are revalued at Rs. 3 lakhs. The company is expected to settle the disputed bonus claim of Rs. 1 lakh not provided for in the accounts. Goodwill appearing in the Balance Sheet is purchased goodwill. It is considered reasonable to increase the value of goodwill by an amount equal to average of the book value and a valuation made at 3 years’ purchase of average super-profit for the last 4 years.

After tax, profits and dividend rates were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>PAT (Rs. in Lakhs)</th>
<th>Dividend %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>3.0</td>
<td>11%</td>
</tr>
<tr>
<td>2015</td>
<td>3.5</td>
<td>12%</td>
</tr>
<tr>
<td>2016</td>
<td>4.0</td>
<td>13%</td>
</tr>
<tr>
<td>2017</td>
<td>4.1</td>
<td>14%</td>
</tr>
</tbody>
</table>

Normal expectation in the industry to which the company belongs is 10%.

Akbar holds 20,000 equity shares of Rs. 10 each fully paid and 10,000 equity shares of Rs. 6 each, fully paid up. He wants to sell away his holdings.

(i) Determine the break-up value and market value of both kinds of shares.

(ii) What should be the fair value of shares, if controlling interest is being sold?

**Answer:**

(i) Break up value of Re. 1 of share capital = \( \text{Rs. 28.98 lakhs} \)
\( \text{Rs. 16.00 lakhs} \)
\( = \text{Rs. 1.81} \)

Break up value of Rs. 10 paid up share = \( 1.81 \times 10 = \text{Rs. 18.10} \)

Break up value of Rs. 6 paid up share = \( 1.81 \times 6 = \text{Rs. 10.86} \)

Market value of shares:

Average dividend = \( \frac{11\% + 12\% + 13\% + 14\%}{4} = 12.5\% \)

Market value of Rs. 10 paid up share = \( \frac{12.5\% \times 10}{10\%} = \text{Rs. 12.50} \)

Market value of Rs. 6 paid up share = \( \frac{12.5\% \times 6}{10\%} = \text{Rs. 7.50} \)
(ii) Break up value of share will remain as before even if the controlling interest is being sold. But the market value of shares will be different as the controlling interest would enable the declaration of dividend up to the limit of disposable profit.

\[ \frac{\text{Average Profit}^*}{\text{Paid up value of shares}} \times 100 \]

\[ = \frac{\text{Rs. 3.4 lakhs}}{\text{Rs. 16 lakhs}} \times 100 = 21.25\% \]

Market value of shares:

For Rs. 10 paid up share = \( \frac{21.25\% \times 10}{10\%} = \text{Rs. 21.25} \)

For Rs. 6 paid up share = \( \frac{21.25\% \times 6}{10\%} = \text{Rs. 12.75} \)

Fair value of shares = \( \frac{\text{Break up value + Market value}}{2} \)

Fair value of Rs. 10 paid up share = \( \frac{18.10 + 21.25}{2} = \text{Rs. 19.68} \)

Fair value of Rs. 6 paid up share = \( \frac{10.86 + 12.75}{2} = \text{Rs. 11.81} \)

* (Transfer to reserves has been ignored)

**Working Notes:**

**(Rs. in lakhs)**

**(A) Calculation of Average Capital Employed**

Fixed assets \hspace{1cm} 24.00

Other tangible assets \hspace{1cm} 3.00

Intangible assets \hspace{1cm} 3.00

\[ \frac{30.00}{- \text{Liabilities}} \]

Less : \( \frac{1}{2} \) of profits \[ \frac{1}{2} (4.1 - \text{Bonus}) \] \hspace{1cm} 1.55

Average capital employed \hspace{1cm} 17.45

**(B) Calculation of Super Profit**

Average profit = \( \frac{1}{4} (3 + 3.5 + 4 + 4.1 - \text{Bonus}) \)

\[ = \frac{1}{4} \times 13.6 = 3.400 \]

Less : Normal profit = 10% of Rs. 17.45 lakhs 1.745

Super profit = 1.655
3 Years’ purchase of average super-profit = 3 \times 1.655 = \text{Rs. 4.965 lakhs}

Increase in value of goodwill = \frac{1}{2} (\text{book value} + 3 \text{ years’ super profit})
= \frac{1}{2} (5 + 4.965) = \text{Rs. 4.9825 lakhs}

\begin{align*}
\text{Net assets as revalued including book value of goodwill} & \quad \text{24.00} \\
\text{Add : Increase in goodwill (rounded-off)} & \quad \text{4.98} \\
\text{Net assets available for shareholders} & \quad \text{28.98}
\end{align*}

**VALUATION OF BUSINESS**

Business valuation is a process and a set of procedures used to estimate the economic value of an owner’s interest in a business. Valuation is used by financial market participants to determine the price they are willing to pay or receive to affect a sale of a business. In addition to estimating the selling price of a business, the same valuation tools are often used by business appraisers to resolve disputes related to estate and gift taxation, divorce litigation, allocate business purchase price among business assets, establish a formula for estimating the value of partners’ ownership interest for buy-sell agreements, and many other business and legal purposes.

**Three Business Valuation Methods**

**1. Asset-Based Approach**

Basically, these business valuation methods total up all the investments in the business.

Asset-based business valuations can be done on a going concern or on a liquidation basis.

- A going concern asset-based approach lists the business’s net balance sheet value of its assets and subtracts the value of its liabilities.
- A liquidation asset-based approach determines the net cash that would be received if all assets were sold and liabilities paid off.

**2. Earning Value Approach**

These business valuation methods are predicated on the idea that a business’s true value lies in its ability to produce wealth in the future. The most common earning value approach is Capitalizing Past Earnings.

With this approach, a valuator determines an expected level of cash flow for the company using a company’s record of past earnings, normalizes them for unusual revenue or expenses, and multiplies the expected normalized cash flows by a capitalization factor.

The capitalization factor is a reflection of what rate of return a reasonable purchaser would expect on the investment, as well as a measure of the risk that the expected earnings will not be achieved.

**3. Market Value Approach**

Market Approach refers to the notion of arriving at the value of a company by comparing it to the market value of similar publicly listed companies. The comparison is based on certain financial ratios or multiples, such as the price to book value, price to earnings, EV/EBITDA, etc., of the equity in question to those of its peers. This type of approach, which is popular as a strategic tool in the financial industry, is mainly statistical, based on historical data, and current market sentiments. This is also known as relative valuation method.

A market approach is a method of determining the appraisal value of an asset based on the selling price of similar items. The market approach is a business-valuation method that can be used to calculate the value of
property or as part of the valuation process for a closely held business. Additionally, the market approach can be used to determine the value of a business ownership interest, security or intangible assets. Regardless of what asset is being valued, the market approach studies recent sales of similar assets, making adjustments for differences in size, quantity or quality.

**VALUATION OF INTANGIBLE ASSETS**

**Intangible Assets**

Intangible asset is defined as a capital asset having no physical existence, its value being dependent on the rights that possession confers upon the owner. Intangible assets are expected to benefit the firm beyond the current operating cycle of the business.

Accounting Standard (AS) 26 Intangible Assets issued by the Institute of Chartered Accountants of India deals with meaning and valuation of intangible assets. According to this Accounting Standard, an intangible asset is an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.

If an item covered by AS-26 does not meet the definition of an intangible asset, expenditure to acquire it or generate it internally is recognized as an expense when it is incurred. However, if the item is acquired in an amalgamation in the nature of purchase, it forms part of the goodwill recognized at the date of the amalgamation.

Following are the features of intangible assets:

(i) It is non-physical in nature.
(ii) It gives the specific rights to the holders over several future years.
(iii) It is possible for multiple uses at the same time.
(iv) It creates future value.
(v) It is identifiable as non-monetary asset.
(vi) It has limited ability to protect property rights.
(vii) Investment in intangible assets is basically risky

**Approaches for Valuing Intangible Assets**

There are three approaches used in valuing intangible assets;

(i) **Cost Approach**

In cost approach, expenditure incurred in developing the asset is aggregated. If the asset has been purchased recently, its purchase price may be taken to be the cost.

(ii) **Market-Value Approach**

In market-value approach, valuation is made by reference to transactions involving similar assets that have taken place recently in similar markets.

(iii) **Economic-Value Approach**

Economic value approach is based on the cash flows or earnings attributable to those assets and the capitalization thereof, at an appropriate discount rate or multiple rate.

**Recognition and Initial Measurement of an Intangible Asset**

An intangible asset should be recognized if, and only if:
(a) it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise; and
(b) the cost of the asset can be measured reliably.

**Acquisition of Intangible Assets as Part of an Amalgamation**

An intangible asset acquired in an amalgamation in the nature of purchase is accounted for in accordance with Accounting Standard (AS) 14, Accounting for Amalgamations. Judgement is required to determine whether the cost (i.e., fair value) of an intangible asset acquired in an amalgamation can be measured with sufficient reliability for the purpose of separate recognition.

Certain enterprises that are regularly involved in the purchase and sale of unique intangible assets have developed techniques for estimating their fair values indirectly. These techniques may be used for initial measurement of an intangible asset acquired in an amalgamation in the nature of purchase if their objective is to estimate fair value and if they reflect current transactions and practices in the industry to which the asset belongs. These techniques include, where appropriate, applying multiples reflecting current market transactions to certain indicators driving the profitability of the asset (such as revenue, market shares and operating profit) or discounting estimated future net cash flows from the asset.

**Amortization of Intangible Assets**

1. **Amortization Period**

   The depreciable amount of an intangible asset should be allocated on a systematic basis over the best estimate of its useful life. There is a rebuttable presumption that the useful life of an intangible asset will not exceed ten years from the date when the asset is available for use. Amortization should commence when the asset is available for use.

   As the future economic benefits embodied in an intangible asset are consumed over time, the carrying amount of the asset is reduced to reflect that consumption. This is achieved by systematic allocation of the cost of the asset, less any residual value, as an expense over the asset’s useful life. Amortization is recognized whether or not there has been an increase in, for example, the asset’s fair value or recoverable amount.

2. **Amortization Method**

   The amortization method used should reflect the pattern in which the asset’s economic benefits are consumed by the enterprise. If that pattern cannot be determined reliably, the straight-line method should be used. The amortization charge for each period should be recognized as an expense, unless some Accounting Standard permits or requires it to be included in the carrying amount of another asset.

**Recoverability of the Carrying Amount – Impairment Losses**

To determine whether an intangible asset is impaired, an enterprise applies Accounting Standard on Impairment of Assets, which explains how an enterprise reviews the carrying amount of its assets and how it determines the recoverable amount of an asset, and when it recognizes or reverses an impairment loss.

If an impairment loss occurs before the end of the first annual accounting period commences after the acquisition for of an intangible asset acquired in an amalgamation in the nature of purchase, the impairment loss is recognized as an adjustment to both the amount assigned to the intangible asset and the goodwill (capital reserve) recognized at the date of the amalgamation. However, if the impairment loss relates to specific events or changes in circumstances occurring after the date of acquisition, the impairment loss is recognized under Accounting Standard on Impairment of Assets and not as an adjustment to the amount assigned to the goodwill (capital reserve) recognized at the date of acquisition.
MEANING OF GOODWILL

Goodwill is an intangible but not a fictitious asset, which implies that it has some realizable value. From the accountants’ point of view goodwill, in the sense of attracting custom, has little significance unless it has a saleable value. To the accountant, therefore, goodwill may be said to be that element arising from the reputation, connection, or other advantages possessed by a business which enables it to earn greater profits than the return normally expected on the capital represented by the net tangible assets employed in the business. In considering the return normally expected, the nature of the business has to be taken into consideration, the risks involved, fair management remuneration and any other relevant circumstances. The goodwill possessed by a firm may be due, inter alia, to the following:

1. The location of the business premises, the nature of the firm’s products or the reputation of its services.
2. The possession of favourable contracts, complete or partial monopoly, etc.
3. The personal reputation of the promoters.
4. The possession of efficient and contented employees.
5. The possession of trade marks, patents or a well-known business name.
6. The continuance of advertising campaigns.
7. The maintenance of the quality of the firm’s product and development of the business with changing conditions.

The need for evaluating goodwill may arise in the following cases:

1. when the business or when the company is about to be sold to another company or when the company is about to be amalgamated with another company;
2. when stock exchange quotations are not available, company’s shares have to be valued for taxation purposes, gift tax, etc.;
3. when a large block of shares, so as to enable the holder to exercise control over the company concerned, has to be bought or sold; and
4. when the company has previously written off its goodwill and wants its right back. In the valuation of goodwill consideration of the following factors will have a bearing:
   (a) nature of the industry, its history and the risks to which it is subject to;
   (b) prospects of the industry in the future;
   (c) the company’s history – its past performance and its record of past profits and dividends;
   (d) the basis of valuation of assets of the company and their value;
   (e) the ratio of liabilities to capital;
   (f) the nature of the management and the chances of its continuation;
   (g) capital structure or gearing;
   (h) size, location and reputation of the company’s products;
   (i) the incidence of taxation;
   (j) the number of shareholders;
   (k) yield on shares of companies engaged in the same industry which are listed on the Stock Exchanges;
   (l) composition of purchasers of the products of the company;
Internally Generated Goodwill

Internally generated goodwill should not be recognized as an asset.

To assess whether an internally generated intangible asset meets the criteria for recognition, an enterprise classifies the generation of the asset into:

(a) a research phase; and
(b) a development phase.

1. Research Phase

No intangible asset arising from research (or from the research phase of an internal project) should be recognized. Expenditure on research (or on the research phase of an internal project) should be recognized as an expense when it is incurred.

2. Development Phase

An intangible asset arising from development (or from the development phase of an internal project) should be recognized if, and only if, an enterprise can demonstrate all of the following:

(a) the technical feasibility of completing the intangible asset so that it is available for use or sale;
(b) its intention to complete the intangible asset and use or sell it;
(c) its ability to use or sell the intangible asset;
(d) how the intangible asset will generate probable future economic benefits. Among other things, the enterprise should demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset;
(e) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
(f) its ability to measure the expenditure attributable to the intangible assets during its development reliably.

Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance should not be recognized as intangible assets.

METHODS OF VALUING GOODWILL

1. AVERAGE PROFITS METHOD

Under this method, goodwill is expressed to be a purchase of certain number of years profit based on the average of a given period.

This involves two steps:

(a) Calculation of average profit taking into consideration the profit of the preceding years.
(b) Multiplying the average profit with number of purchase years.

Why Average Profits?

Goodwill is paid for obtaining a future advantage. However, the future is uncertain and is usually estimated on the basis of past. Therefore, in a business what profits are likely to accrue in the future depends upon its average performance in the past and hence the average profits.
Illustration 4.

X purchased business from Y on 30th June 2017. Profit earned by Y for the preceding years ending on 31st December every year were: 2014 Rs. 41,000, 2015 Rs. 40,000, and 2016 Rs. 42,000.

It was ascertained that profits of 2015 included a non-recurring item of Rs. 1500 and profit of 2016 was reduced by Rs. 2000 due to an extraordinary loss on account of theft. The annual premium was Rs. 200 per annum. X at the time of purchasing the business, was employed with Rama Bros and was getting Rs. 500 p.m. he intends to replace the manager who at the present is getting Rs. 350 p.m. the goodwill is calculated at 2 years purchase of the average profits. Calculate the goodwill of the business.

Solution: Rs.

| Profits (2014) | 41,000 |
| Profits (2015) | 38,500 (40,000 – 1500) |
| Profits (2016) | 44,000 (42,000 + 2,000) |
| Total Profits | 1,23,500 |

Average profits = \( \frac{1,23,500}{3} = 41,167 \)

Less: insurance premium (annual) | 200 |
Salary (Rs 500 x 12) | 6,000 |
Add: salary of manager (12 x 350) | 4,200 |

Net average profit = 39,167

Goodwill = 39,167 x 2 = 78,334

2. SUPER PROFIT METHOD

In this case the future maintainable profits of the firm are compared with the normal profits for the firm. Normal earnings of a business can be judged only in the light of normal rate of earning and capital employed in the business.

There are three methods of calculating goodwill based on super profit which are as under:

(i) **PURCHASE OF SUPER PROFIT METHOD**

   Goodwill as per this method is

   = super profit x number of purchase years

(ii) **SLIDING – SCALE VALUATION OF SUPER PROFIT**

   This method is a variation of the purchase method. This has been advocated by A.E. Cutforth, and is based upon the theory that the greater the amount of super profit, the more difficult it would be to maintain. In this method the super profit is divided into two or three divisions. Each of these is multiplied by a different number of years’ purchase, in descending order from the first division.

   For example, if super profit is estimated at Rs. 2,25,000,

   **Goodwill Be Calculated As Follows:**

<table>
<thead>
<tr>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Rs 75,000 say 5 years</td>
</tr>
<tr>
<td>Second Rs 75,000 say 4 years</td>
</tr>
</tbody>
</table>
(iii) Capitalization Of Super Profit

\[
\frac{\text{Average Annual Super Profit} \times 100}{\text{Normal Rate of Return}}
\]

Illustration 5.

From the following particulars of three companies ascertain the value of goodwill.

Terms and conditions are as follows:

(i) Assets are to be revalued.

(ii) Goodwill is to be valued at four years’ purchase of average super profits for three years. Such average is to be calculated after adjustment of depreciation at ten per cent on the amount of increase/decrease on revaluation of fixed assets. Income tax is to be ignored.

(iii) Normal profit on capital employed is to be taken at 10 percent, capital employed being considered on the basis of net revalued amounts of tangible assets.

The summarized Balance Sheets and relevant information are given below:

(Rs. in Lakhs)

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>P Ltd.</th>
<th>Q Ltd.</th>
<th>R Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity shares of Rs.10 each</td>
<td>24.00</td>
<td>28.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Reserves</td>
<td>4.00</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>10 percent debentures</td>
<td>8.00</td>
<td>-</td>
<td>4.00</td>
</tr>
<tr>
<td>Expenses and creditors</td>
<td>8.00</td>
<td>6.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>44.00</td>
<td>36.00</td>
<td>24.00</td>
</tr>
</tbody>
</table>

Assets

<table>
<thead>
<tr>
<th></th>
<th>P Ltd.</th>
<th>Q Ltd.</th>
<th>R Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td>-</td>
<td>2.0</td>
<td>-</td>
</tr>
<tr>
<td>Net tangible block</td>
<td>32.00</td>
<td>24.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Current assets</td>
<td>12.00</td>
<td>10.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>44.00</td>
<td>36.00</td>
<td>24.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>P Ltd.</th>
<th>Q Ltd.</th>
<th>R Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revaluation of tangible block</td>
<td>40,00,000</td>
<td>20,00,000</td>
<td>24,00,000</td>
</tr>
<tr>
<td>Revaluation of current assets</td>
<td>14,00,000</td>
<td>5,60,000</td>
<td>3,20,000</td>
</tr>
<tr>
<td>Average annual profit for three years before charging debenture interest</td>
<td>7,20,000</td>
<td>5,76,000</td>
<td>2,72,000</td>
</tr>
</tbody>
</table>
Solution:

<table>
<thead>
<tr>
<th></th>
<th>P Ltd.</th>
<th>Q Ltd.</th>
<th>R Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average profit after charging debenture Interest</td>
<td>640,000</td>
<td>576,000</td>
<td>272,000</td>
</tr>
<tr>
<td>Less/Add : Depreciation on revaluation</td>
<td>(80,000)</td>
<td>40,000</td>
<td>(40,000)</td>
</tr>
<tr>
<td></td>
<td>5,60,000</td>
<td>6,16,000</td>
<td>2,32,000</td>
</tr>
<tr>
<td>Less : Normal profit at 10% (WN1) (192,000)</td>
<td>(3,80,000)</td>
<td>(1,96,000)</td>
<td></td>
</tr>
<tr>
<td>Super Profit</td>
<td>1,80,000</td>
<td>4,20,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Goodwill at 4 years' purchase of super Profits</td>
<td>7,20,000</td>
<td>6,80,000</td>
<td>1,60,000</td>
</tr>
</tbody>
</table>

W.N.1 Calculation of Capital Employed

<table>
<thead>
<tr>
<th></th>
<th>P Ltd.</th>
<th>Q Ltd.</th>
<th>R Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible fixed assets</td>
<td>40,00,000</td>
<td>20,00,000</td>
<td>24,00,000</td>
</tr>
<tr>
<td>Current assets</td>
<td>14,00,000</td>
<td>560,000</td>
<td>320,000</td>
</tr>
<tr>
<td>Less : Debentures and Creditors</td>
<td>(16,00,000)</td>
<td>(6,00,000)</td>
<td>(8,00,000)</td>
</tr>
<tr>
<td></td>
<td>38,00,000</td>
<td>19,60,000</td>
<td>19,20,000</td>
</tr>
</tbody>
</table>

3. CAPITALIZATION OF AVERAGE PROFIT

The capitalization of profit method values goodwill at the excess of capital that should have been employed for earning the average profit over the capital which has been actually employed. In this method, the value of whole business is found by using the formula

\[
\text{Capitalization} = \frac{\text{Average annual profit}}{\text{Normal rate of return}} \times 100
\]

From this figure, net assets (excluding goodwill) of the firm are deducted and the resultant figure will be the goodwill.

Illustration 7.

U.K. International Ltd. is developing a new production process. During the financial year ending 31st March, 2017, the total expenditure incurred was Rs. 50 lakhs. This process met the criteria for recognition as an intangible asset on 1st December, 2016. Expenditure incurred till this date was Rs. 22 lakhs. Further expenditure incurred on the process for the financial year ending 31st March, 2018 was Rs. 80 lakhs. As at 31st March, 2018, the recoverable amount of know-how embodied in the process is estimated to be Rs. 72 lakhs. This includes estimates of future cash outflows as well as inflows.

You are required to calculate:

(i) Amount to be charged to Profit and Loss A/c for the year ending 31st March, 2017 and carrying value of intangible as on that date.

(ii) Amount to be charged to Profit and Loss A/c and carrying value of intangible as on 31st March, 2018. Ignore depreciation.

Solution:

(a) As per AS 26 'Intangible Assets'

(i) For the year ending 31.03.2017

(1) Carrying value of intangible as on 31.03.2017:

At the end of financial year 31st March 2017, the production process will be recognized (i.e., carrying amount)
as an intangible asset at a cost of Rs. 28 lakhs (expenditure incurred since the date the recognition criteria were met, i.e., on 1st December 2016).

(2) Expenditure to be charged to Profit and Loss Account:
The Rs. 22 lakhs is recognized as an expense because the recognition criteria were not met until 1st December 2017. This expenditure will not form part of the cost of the production process recognized in the balance sheet.

(ii) For the year ending 31.03.2018
(1) Expenditure to be charged to Profit and Loss account: (Rs. in lakhs)

| Carrying Amount as on 31.03.2017 | 28 |
| Expenditure during 2017–2018 | 80 |
| Total book cost | 108 |
| Recoverable Amount | 72 |
| Impairment loss | 36 |

Rs. 36 lakhs to be charged to Profit and Loss Account for the year ending 31.03.2008.

(2) Carrying value of intangible as on 31.03.2018:  (Rs. in lakhs)

| Total Book Cost | 108 |
| Less : Impairment loss | 36 |
| Carrying amount as on 31.03.2018 | 72 |

Illustration 8.
Dell International Ltd. is developing a new production process. During the financial Year 31st March, 2016, the total expenditure incurred on this process was Rs. 40 lakhs. The production process met the criteria for recognition as an intangible asset on 1st December 2015. Expenditure incurred till this date was Rs.16 lakhs. Further expenditure incurred on the process for the financial year ending 31st March 2017 was Rs.70 lakhs. On 31-03-2017, the recoverable amount of know-how embodied in the process is estimated to be Rs. 62 lakhs. This includes estimates of future cash outflows as well as inflows.

You are required to work out:

(a) What is the expenditure to be charged to the Profit and Loss Account for the financial year ended 31st March 2016? (Ignore depreciation for this purpose)
(b) What is the carrying amount of the intangible asset as at 31st March 2016?
(c) What is the expenditure to be charged to the Profit and Loss Account for the financial year ended 31st March 2017? (Ignore depreciation for this purpose)
(d) What is the carrying amount of the intangible asset as on 31st March 2017?

Solution:

(a) Rs. 16 lakhs
(b) Carrying amount as on 31-03-2016 will be expenditure incurred after 01-12-2015 = Rs. 24 lakhs
(c) Book cost of intangible asset as on 31-03-2017 is as follows

| Total Book cost = Rs.(70 + 24) lakhs = Rs. 94 lakhs |
| Recoverable amount as estimated = Rs. 62 lakhs |
Lesson 20  Valuation of Shares, Business and Intangible Assets 551

Difference to be charged to Profit and Loss account = Rs. 32 lakhs

(d) Rs. 62 lakhs

Illustration 9.
A Pharma Company spent Rs. 33 lakhs during the accounting year ended 31st March, 2016 on a research project to develop a drug to treat “AIDS”. Experts are of the view that it may take four years to establish whether the drug will be effective or not and even if found effective it may take two to three more years to produce the medicine, which can be marketed. The company wants to treat the expenditure as deferred revenue expenditure. Comment.

Solution:
As per para 41 of AS 26 ‘Intangible Assets’, no intangible asset arising from research (or from the research phase of an internal project) should be recognized. Expenditure on research (or on the research phase of an internal project) should be recognized as an expense when it is incurred.

Thus the company cannot treat the expenditure as deferred revenue expenditure. The entire amount of Rs. 33 lakhs spent on research project should be charged as an expense in the year ended 31st March, 2016.

Illustration 10.
From the following data compute the ‘Intrinsic’ value of each category of equity shares of Ankit Ltd.:

Shareholders funds
100,000 ‘A’ Equity shares of Rs.10 each, fully paid
100,000 ‘B’ Equity shares of Rs.10 each, Rs. 8 paid
100,000 ‘C’ Equity shares of Rs.10 each, Rs. 5 paid
Retained Earnings Rs.9,00,000

Solution:
Computation of Net assets
(i) Worth of net assets is equal to shareholders’ fund, i.e.,
   Paid up value of ‘A’ equity shares 100,000 x Rs. 10 = 10,00,000
   Paid up value of ‘B’ equity shares 100,000 x Rs. 8 = 8,00,000
   Paid up value of ‘C’ equity shares 100,000 x Rs. 5 = 5,00,000
   Retained earnings = 9,00,000
   Net assets = 32,00,000

   Add: Notional calls (100,000 x 2 + 100,000 x Rs. 5) = 7,00,000
   Intrinsic Value of each equity share of Rs. 10 fully paid up = 39,00,000 / 300,000 = Rs. 13

(ii) Intrinsic values of each category of equity shares
   ‘A’ equity shares of Rs. 10 fully paid up Rs 13
   ‘B’ equity shares of Rs. 10 each, out of which Rs. 8 paid up(13-2)= Rs 11
   Value of ‘C’ Equity shares of Rs. 10 each, out of which Rs. 5 paid up (13-5)= Rs 8

Illustration 11.
Average profit of a firm is Rs. 48,000. The rate of capitalization is 12%. Assets and liabilities of the firm are Rs. 4,00,000 and Rs. 1,70,000 respectively.
Solution:

Net Assets = Total assets – Outside liabilities
= 4,00,000 – 1,70,000
= Rs. 2,30,000

Value of goodwill = \( \frac{\text{Average Profit} \times 100}{\text{NRR}} - \text{Net assets} \)

= \( \frac{48,000 \times 100}{12} - 2,30,000 \)
= 4,00,000 - 2,30,000
= Rs. 1,70,000

Illustration 12.

A firm has a total capital investment of Rs. 2,25,000. The firm earned net profit during the last four years Rs. 35,000 , Rs. 40,000 , Rs. 60,000 , Rs. 50,000. The fair return on the net capital employed is 15%. Find out the value of goodwill if it is based on 3 years' purchase of the average super profits of past four years.

Solution: Rs.

Total profit earned during four years 1,85,000
Average annual profit 46,250
(1,85,000 /4)
Fair return on capital employed 33,750
(15% of 2,25,000)
Super Profit 12,500
(46,250 – 33,750)
Value of goodwill 37,500
(12,500 x 3)

REGULATORY VALUATIONS

SEBI

The valuation requirements specified under some of the Regulations issued under by the SEBI

IPO Issue Pricing

(a) All companies are permitted to price their issues in consultation with the Lead Merchant Banker or through the book building process. For book building the floor price or the price band should be mentioned. In case of a band, the ceiling should not be more than 20% of the floor of the band, i.e., the range should be 20%. The cut-off price is fixed through a price discovery process.

(b) No Valuation Methodology is prescribed for the same. However, the basis for issue price, floor price or price band needs to be disclosed in the Prospectus and Advertisement for Public Issue and justified by the Issuer Company on the grounds of Qualitative Factors along with the following Quantitative Factors:
• EPS and Diluted EPS for last 3 years
• Price Earning Ratio on pre-issue basis
• Average Return on Net worth in the last 3 years
• Minimum Return on Increased Net worth to maintain pre-issue EPS
• Net Asset Value based on last Balance Sheet and post-issue
• Comparison of above Accounting Ratios of issuer with peers.
Rights Issue Pricing

(a) All companies are permitted to freely price their rights issue.

(b) No Valuation Methodology is prescribed.

Preferential Issue

(a) Shares are listed for 26 weeks or more as on the Relevant Date. The equity shares shall be allotted at a price which is not less than higher of the average of weekly high/low of closing prices during: or 26 weeks prior to the Relevant Date, or 2 weeks prior to the Relevant Date. Relevant Date is defined as a period 30 days prior to the EGM date, where the resolution u/s. 81(1A) is passed.

(b) Shares are listed for less than 26 weeks as on the Relevant Date. The equity shares shall be allotted at a price which is not less than higher of the following:
   - IPO Price or value arrived at under Scheme of Arrangement of Average of weekly high/low of closing prices during the period prior to the Relevant Date of Average of weekly high/low of closing prices during the 2 weeks prior to the Relevant Date. Relevant Date is defined as a period 30 days prior to the EGM date where the resolution u/s. 81(1A) is passed. The price shall be recomputed on completion of 26 weeks from the date of listing with reference to the average of the weekly high and low of the closing price during the 26 weeks. If such recomputed price is higher than the price of Preferential Allotment, then the difference shall be paid by the allottees to the Issuer Company.

(c) Preferential Allotment to QIBs should not exceed 5 in number. The equity shares shall be allotted at a price which is not less than the average of weekly high/low of closing prices during 2 weeks, prior to the Relevant Date. Relevant Date is defined as a period 30 days prior to the EGM date where the resolution u/s. 81(1A) is passed.

(e) Consideration other than Cash – When the securities are issued on a preferential basis to promoters and related parties for consideration other than cash, a valuation of the assets received in consideration shall be carried out by an independent qualified valuer, being a CA or a merchant banker. This valuation must be submitted to the stock exchange where the company is listed. In case the exchange is not satisfied with this valuation, it may get the valuation redone from any other valuer.

(f) Private Placement by Unlisted Public Company – The Unlisted Public Companies (Preferential Allotment) Rules, 2003 issued u/s. 81(1A) of the Companies Act, 1956 deals with the preferential allotment of shares and convertible securities unlisted public companies. The Notice calling the Meeting to pass such an issue must disclose the price or price band at which the allotment is proposed and the Relevant Date on the basis of which price has been arrived at. Further, where Warrants are issued on a preferential basis with an option to apply for and get the shares allotted, the issuing company shall determine beforehand the price of the resultant shares.

Buy-back of Shares

It may be noted that the SEBI Buy-back Regulations do not specify any pricing mechanism for determining the buy-back price. Similarly, the Unlisted Public Company Buyback Rules, 1999 do not specify any pricing mechanism for determining the buy-back price.

Delisting

The SEBI Delisting Regulations, 2009 govern the provisions pertaining to voluntary delisting of equity shares from a stock exchange by the promoter. Thus, the promoter buys out the public shareholding and gets the shares delisted. The promoter needs to fix the floor price. It shall not be less than:

(a) Where the equity shares are frequently traded, the higher of the average of the weekly high and low of
the closing prices of the equity shares during the 26 weeks or 2 weeks preceding the date on which the Board Meeting took up the delisting proposal and notified it to the exchanges.

(b) Where the equity shares are infrequently traded, the floor price would be determined by the merchant banker considering the following factors: • The highest price paid by the promoter during the 26 weeks period prior to the date on which the proposal was considered • Other parameters, include return on net worth, book value, EPS, price-earning multiple vis-à-vis the industry average.

FEMA

Let us examine the valuation requirements under the FEMA Regulations.

FEMA (Transfer or Issue of Security by a Person Resident Outside India) Regulations, 2000: These Regulations deal with Foreign Direct Investment (FDI) into India and the transfer of shares from or to a person resident outside India. These Regulations provide for numerous valuation requirements which have been explained below.

Issue of Equity Shares by an Indian Company to a Non-Resident

(a) Issue by Listed Companies – The shares can be issued at a price determined based on the valuation guidelines prescribed under the SEBI Regulations. Though not specified, it should mean the Preferential Allotment Guidelines of the SEBI (ICDR) Regulations, 2009.

(b) Issue by Unlisted Companies – The shares must be issued at price not less than the fair value of shares determined as per the DCF Method by a Merchant Banker or a CA.

Downstream Investment by an Indian company in another Indian company

Downstream investment means indirect foreign investment by one Indian company, which is not owned and/or controlled by resident Indian entities, into another Indian company. The share investment, even in such a case, must comply with the valuation guidelines explained above for an FDI investment. Thus, the downstream is put on par with an FDI investment.

Rights Issue of Equity Shares by an Indian Company to a Non-Resident

(a) Issue by Listed Companies – The shares can be issued at a price determined by the company.

(b) Issue by Unlisted Companies – The shares can be issued at a price not less than the price at which the offer on rights basis is made to the resident shareholders.

Transfer / Sale of Shares by a Resident Indian to a Non-Resident

(a) Shares of Listed Companies – The shares can be transferred at a price not less than the price determined as per the Preferential Allotment Guidelines of the SEBI (ICDR) Regulations. The price should be certified by a Merchant Banker or a CA.

(b) Shares of Unlisted Companies – The shares can be transferred at price not less than the fair value of shares determined by a SEBI Registered Merchant Banker or a CA as per the DCF Method. Thus, the DCF value is the floor price for the transfer. While considering the transfer price for sale from a resident to non-resident, the requirements of sec 56(2)(vii) / (viia) of the Income-tax Act and the FEMA Guidelines should be together considered.

Transfer / Sale of Shares by a Non-Resident to a Resident Indian

Such transfer covers sale, buy-back, reduction of capital, an exit to a private equity investor, buy-out by the promoters, etc., would be covered within these Guidelines.
(a) Shares of Listed Companies – The shares can be transferred at a price not more than the price determined as per the Preferential Allotment Guidelines of the SEBI (ICDR) Regulations, 2009. The price should be certified by a Merchant Banker or a CA.

(b) Shares of Unlisted Companies – The shares can be transferred at a price not more than the fair value of shares determined by a Merchant Banker or a CA as per the DCF Method. Thus, the DCF value is the ceiling for the transfer. It is quite common in Share Subscription Agreements for the promoters to give a guaranteed return to the private equity investor at a certain Internal Rate of Return (IRR). It should be noted that a fixed price or an IRR guarantee without considering the FEMA pricing Guidelines is not possible.

**INCOME TAX ACT**

**Valuation as per Section 56 of the Act**

(i) (a) Where individual and HUF receives shares without consideration (aggregate FMV of which exceeds Rs. 50000) - FMV of shares is taxable.

(b) Where individual and HUF receives shares less than aggregate FMV of the shares by Rs. 50,000 – FMV of shares in excess of consideration is taxable.

(ii) (a) Where firm or company in which public are not substantially interested receives shares without consideration (aggregate FMV of which exceeds Rs. 50000) - FMV of shares is taxable.

(b) Where firm or company in which public are not substantially interested receives shares* for consideration less than aggregate FMV of the shares by Rs. 50,000 – FMV of shares in excess of consideration is taxable.

(iii) Where company in which public are not substantially interested receives consideration for issue of shares that exceeds face value of shares Consideration in excess of FMV shares is taxable.

**Rule 11UA(2) read with Section 56**

(i) Quoted Shares

(a) Through recognized stock exchange – Transaction Value is taxable

(b) Not through recognized stock exchange –

- When there is trading on valuation date – lowest price quoted on any recognized stock exchange is taxable.

- When there is no trading on the valuation date – lowest price quoted on any recognized stock exchange on a date immediately preceding the valuation date when such shares were traded is taxable.

(ii) Unquoted Equity Shares

Higher of the following two will be taxable –

(a) Break-up Value Or DCF Method (At the option of assessee).

(b) Valuation based on assets including intangible assets.

**COMPANIES ACT, 2013**

The rules on Registered Valuers have not yet become effective. Following cases require report of registered valuer on valuation of equity shares –

(i) Preferential Allotment (Section 62) o Value of shares shall be determined by a registered valuer in accordance with Companies (Share Capital and Debenture) Rules, 2014.
(ii) This requirement does not apply to listed shares.

**Offer to Minority Shareholders (Section 236)**

Section applies when acquirer or PAC or any person becomes holder of 90% or more of the issued equity share capital by virtue of amalgamation, conversion of securities or any other reason, such acquirer or person to may notify to the company of his intention to buy, remaining equity shares. The price of share will to be determined by a registered valuer.

**Requirement of Registered Valuers (Section 247)**

**Valuation by Registered Valuers**

As per Draft Rules, a CA/SEBI registered merchant bankers among others can be registered as valuers. The valuer appointed under sub-section (1) shall,—

(a) make an impartial, true and fair valuation of any assets which may be required to be valued;

(b) exercise due diligence while performing the functions as valuer;

(c) make the valuation in accordance with such rules as may be prescribed; and

(d) not undertake valuation of any assets in which he has a direct or indirect interest or becomes so interested at any time during or after the valuation of assets.

If a valuer contravenes the provisions of this section or the rules, he shall be punishable with fine from Rs. 25,000 to Rs. 1 lakh. However, if he intends to defraud the company or its members, he shall be punishable with imprisonment for a term which may extend to one year and with fine from Rs. 1 lakh to Rs. 5 lakh.

Also, the valuer will have to refund the remuneration received by him to the company; and pay for the damages to the company, or to any other person for loss arising out of incorrect or misleading statements of particulars made in his report.

**RBI**

It is also pertinent to note that in July 2014, the Reserve Bank of India had done away with the prescription of DCF methodology for valuation under FEMA, providing freedom and flexibility to investors for determining the FMV as per any internationally accepted valuation methodology.

**(I) In Case of Listed Companies**

(a) The issue and transfer of shares including compulsorily convertible preference shares and compulsorily convertible debentures shall be as per the SEBI guidelines;

(b) The pricing guidelines for FDI instruments with optionality clauses shall continue to be in accordance with A.P. (DIR Series), i.e., the non-resident investor shall be eligible to exit at the market price prevailing on the recognized stock exchanges, subject to lock-in period as stipulated, without any assured return.

**(II) In Case of Unlisted Companies**

The issue and transfer of shares including compulsorily convertible preference shares and compulsorily convertible debentures with or without optionality clauses shall be at a price worked out as per any internationally accepted pricing methodology on arm’s length basis. Thus, the guiding principle will be that the non-resident investor is not guaranteed any assured exit price at the time of making such investment/agreement and shall exit at a fair price computed as above at the time of exit subject to lock-in period requirement as applicable in terms of A.P. (DIR Series).
Lesson 20  Valuation of Shares, Business and Intangible Assets

LESSON ROUND UP

- There are two principal methods of valuation of shares: Net Assets Method and Earning Basis.
- Valuation of shares on net asset basis is also called asset backing or intrinsic value or break up value method.
- The earning basis of share valuation is expressed through: Yield method or Dividend yield method or Earning Capacity method.
- Yield basis valuation may take the form of valuation based on rate of return and productivity factor.
- The value of share as per Net Asset Method
  \[ \text{Valuation per Equity Share} = \frac{\text{Balance available for Equity Shareholders}}{\text{No. of Equity Shares with same paid up value}} \]
- The value of share as per rate of return method
  \[ \text{Value of share} = \frac{\text{Possible rate of dividend} \times \text{Paid up value per share}}{\text{Normal rate of dividend}} \]
  OR
  \[ = \frac{\text{Dividend (in rupees) per share}}{\text{Normal rate of dividend}} \times 100 \]
- The value of shares as per rate of earnings method
  \[ \text{Value of share} = \frac{\text{Rate of earning}}{\text{Normal rate of earning}} \times \text{Paid-up value per share} \]
- The value of share as per Fair Value method
  \[ \text{Fair value of share} = \frac{\text{Value by net asset method}}{2} + \text{Value by yield method} \]
- Intangible asset is defined as a capital asset having no physical existence, its value being dependent on the rights that possession confers upon the owner. Accounting Standard (AS) 26 Intangible Assets issued by the Institute of Chartered Accountants of India deals with meaning and valuation of intangible assets.
- There are three approaches used in valuing intangible assets; cost approach, Market value approach, Economic value approach.
- The depreciable amount of an intangible asset should be allocated on a systematic basis over the best estimate of its useful life.
- The amortization charge for each period should be recognized as an expense unless some Accounting Standard permits or requires it to be included in the carrying amount of another asset.

SELF TEST QUESTIONS

1. What do you mean by amortization of an intangible asset?
2. What are the different approaches for valuation of business?
3. How will you deal with internally generated goodwill in the books of accounts?
4. “Stock exchanges are the most common source for ascertaining the value of shares but still it forms an unreliable basis” explain the statement.
5. Write a short note on residual value of an intangible asset.
6. How is an intangible asset recognized? How is initial measurement of intangible asset is done?
7. Write short notes on capital market information-P/E ratio, yield ratio and market value/book value of shares.
8. Briefly discuss methods of valuation of intangible assets.
Lesson 21

ACCOUNTING FOR SHARE BASED PAYMENTS (IND AS 102)

LESSON OUTLINE

- Scope of Ind AS 102
- What is Share Based Payment (SBP) Transaction & Arrangement
- Grant Date
- Vesting and Non-Vesting Conditions
- Classification of Conditions to Receive Share-Based Payments
- Timeline of a Share Option Award
- Share-Based Payment Awards with a Cash Alternative
- Modification, Cancellation or Settlement
- Difference Between IGAAP & Ind-AS 102
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

After studying this chapter, you should be able to:

- Know about the basic of Ind AS 102
- To whom this Ind AS is applicable.
- Importance of Grant Date
- Know about the timeline for the application of Ind AS 102
OBJECTIVE

The objective of this Standard is to specify the financial reporting by an entity when it undertakes a share-based payment transaction. In particular, it requires an entity to reflect on its profit or loss and financial position the effects of share-based payment transactions, including expenses associated with transactions in which share options are granted to employees.

SCOPE

An entity shall apply this Standard in accounting for all share-based payment transactions, whether or not the entity can identify specifically some or all of the goods or services received, including:

1. **Equity-Settled Share-Based Payment Transactions** in which the entity receives goods or services as consideration for equity instruments of the entity (e.g., the grant of shares or share options to employees).

   For equity-settled share-based payment transactions, the entity shall measure the goods or services received, and the corresponding increase in equity, directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. If the entity cannot estimate reliably the fair value of the goods or services received, the entity shall measure their value, and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted.

2. **Determining the Fair Value of Equity Instruments Granted**

   - For transactions measured by reference to the fair value of the equity instruments granted, an entity shall measure the fair value of equity instruments granted at the measurement date, based on market prices if available, taking into account the terms and conditions upon which those equity instruments were granted.
   
   - If market prices are not available, the entity shall estimate the fair value of the equity instruments granted using a valuation technique to estimate what the price of those equity instruments would have been on the measurement date in an arm’s length transaction between knowledgeable, willing parties. The valuation technique shall be consistent with generally accepted valuation methodologies for pricing financial instruments, and shall incorporate all factors and assumptions that knowledgeable, willing market participants would consider in setting the price.

3. **Cash-Settled Share-Based Payment Transactions** in which the entity receives goods or services and incurs a liability based on the price (or value) of the entity’s shares or other equity instruments of the entity as consideration (e.g., the grant of share appreciation rights to employees).

4. **Cash-Settled Share-Based Payment Transactions** which entitle the employees to future cash payments based on the increase in the entity’s share price.

5. **Cash-Settled Share-Based Payment Transactions** in which the entity receives or acquires goods or services and the terms of the arrangement provided either the entity or the supplier of those goods or services with a choice of whether the entity settles the transaction in cash (or other assets) or by issuing equity instruments. In the absence of specifically identifiable goods or services, other circumstances may indicate that goods or services have been (or will be) received, in which case this Standard applies.

Share-based payment transaction may be settled by another group entity (or a shareholder of any group entity) on behalf of the entity receiving or acquiring the goods or services. This is applicable to an entity that:

(a) receives goods or services when another entity in the same group (or a shareholder of any group entity) has the obligation to settle the share-based payment transaction, or

(b) has an obligation to settle a share-based payment transaction when another entity in the same group
receives the goods or services, unless the transaction is clearly for a purpose other than payment for goods or services supplied to the entity receiving them.

**What Is Share Based Payment (SBP) Transaction & Arrangement?**

SBP transaction is a transaction in which the entity:

(a) receives goods or services from the supplier of those goods or services in a SBP arrangement, or

(b) incurs an obligation to settle the transaction with the supplier in a SBP arrangement when another group entity receives those goods or services.

**SBP arrangement** is an agreement between the entity (or another group entity or any shareholder of any group entity) and another party that entitles the other party to receive:

(a) cash or other assets of the entity for amounts that are based on the price (or value) of equity instruments of the entity or another group entity, or

(b) equity instruments of the entity or another group entity, provided the specified vesting conditions, if any, are met.

**Example of Share-Based Payment Arrangements**

**SBP arrangements between employers and employees**

- Share Appreciation Rights (SAR) that entitle employees to cash payments calculated by reference to increases in the market price of an entity’s shares.
- Share ownership plans where employees receive an entity’s shares in exchange for their services.

**SBP arrangements that are not between employers and employees**

- An external consultant (not an employee) may provide services in return for shares in the entity.
- A supplier may provide goods in return for shares in the entity.
- A shareholder (rather than an employer) may grant shares to an employee.

**Important Concepts of Accounting for Share-based payments**

**Grant Date**

Grant date is defined as “the date on which the Company and employees agree to the terms of an employee share-based payment plan. At grant date, the Company confers on the employees the right to cash or shares of the Company, provided the specified vesting conditions, if any, are being met.”

In practice, it is not always clear when a mutual understanding of the award (and, therefore, grant date) has occurred. Issues of interpretation can arise as to:

- how precise the shared understanding of the terms of the award must be, and
- exactly what level of communication between the company and the counterparty is sufficient to ensure the appropriate degree of ‘shared understanding.’

**Important Concepts of Accounting for Share-Based Payments**

**Example – Determination of Grant Date**

XYZ Ltd. grants 100 stock options to each of its 500 employees. The law governing the company requires
approval of the board / shareholders on any such grant. What is the grant date of ESOP in each of the following scenarios?

a) The company communicates the award to employees first, followed by board’s / shareholders approval. The award is approved with the same terms as initially communicated to employees.

b) Shareholder / board’s approval is obtained first, and later the award is communicated to the employees.

c) The award is communicated to the individual employees, but when it goes to the shareholders/board for approval, the shareholders/board change the original award from how it was initially communicated to employees. The entity then communicates the new terms to employees.

Grant Date In Each Of The Scenarios Above:

a) Grant date is the board’s/shareholders approval date.

b) Grant date is the date of communication of the award to the employees as this is the date on which the company and its employees agree to the terms of the ESOP.

c) Grant date is the subsequent communication date to employees, as this is the date when the company and its employees have a shared an understanding of the terms and condition of the ESOP plan.

**Date of Receipt of Goods and Services**

Determination of date on which goods and services are received is critical, as the company is required to recognise employee stock compensation expense on the date of receipt of goods and services. The date of receipt of goods and services may not be the same as grant date, if the goods or services are received prior to the grant date.

For example, on 1st January, 2013 an entity advises employees of the terms of a share award designed to reward performance over the three years ended 31st December, 2015. The award is subject to board’s approval, which is given on 1st March, 2013. In this case, grant date is 1st March, 2013. However, the cost of the award would be recognized over the three year period beginning 1st January, 2013, since the employees would have effectively been rendering service for the award from that date.

**Important Concepts of Accounting for Share-Based Payments**

**Vesting and non-vesting conditions**

A share-based payment award generally vests upon meeting specified conditions, such as service conditions (time-based) or performance conditions (e.g., achieving a specified EBITDA target).

Under IND AS 102, the nature of the condition affects the timing of when the expense is recognized, and in some cases, the measurement of the expense.

In addition, if a condition is not met, whether or not the entity may reverse the previously recognized compensation expense depends on the nature of the condition that was not met. Therefore, the classification of a condition is a critical step in accounting for share-based payments.
Classification of Conditions to Receive Share-Based Payments:

Does the condition determine whether the entity receives the services that entitle the counterparty to the share-based payment?

- **NO**
  - Non-vesting condition

- **YES**
  - Is the condition a specified period of service?
    - **YES**
      - Service vesting condition
    - **NO**
      - Performance vesting condition

Does the condition on which the exercise price, vesting or exercisability of an equity instrument depends relate to the market price of the entity’s equity instruments, either directly or indirectly?

- **NO**
  - Market vesting condition

- **YES**
  - Non-market vesting condition

**Timeline of A Share Option Award**

- **Vesting Period**: Period during which all specified vesting conditions are to be satisfied.

  **(YEAR 1&2)**
  - **Grant Date**: Date at which entity and counterparty have shared understanding of terms and conditions of arrangement

  **(YEAR 3)**
  - **Vesting Date**: Date that vesting conditions for entitlement satisfied conditions of arrangement

  **(YEAR 4)**
  - **Exercise Date**: Date that awards exercised satisfied conditions of arrangement
**Example: Vesting Period - Award with service condition only**

If an employee remains in service for at least three years from the grant date of the award, the employee can exercise the options at any time after the end of three years and on or before ten years from the grant date of the award. The fair value of the award at the grant date, ignoring the effect of the vesting condition, is Rs. 3,00,000.

For this award, the vesting period is three years, the exercise period is seven years, and the life of the option is ten years.

The requirement to remain employed is a (vesting) service condition. The entity recognizes an expense of Rs.1,00,000 a year for three years, with a corresponding increase in equity. If the employee leaves at the start of year three, the entity reverses the cumulative expense previously recognized (i.e., Rs. 2,00,000) in the current year.

### Overview Of Equity And Cash Settled - Measurement

<table>
<thead>
<tr>
<th>Counterparty</th>
<th>Measurement basis</th>
<th>Initial Measurement date</th>
<th>Recognition date</th>
<th>Subsequent Measurement Basis and date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity Settled Awards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>Fair value of equity instruments awarded</td>
<td>Grant date</td>
<td>Date goods or services received</td>
<td>No remeasurement</td>
</tr>
<tr>
<td>Non-employee</td>
<td>Fair value of goods or services received</td>
<td>Date goods or services received</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cash Settled Awards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>Fair value of Liability</td>
<td>Grant date</td>
<td>Date goods or services received</td>
<td>Re-measurement of fair value at each reporting date.</td>
</tr>
<tr>
<td>Non-employee</td>
<td>Fair value of Liability</td>
<td>Date goods or services received</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Recognition Principle

**TIMINGS**

- **GOODS**: WHEN RECEIVED
- **SERVICES**: WHEN OBTAINED

**RECOGNITION (debit entry)**

- **EXPENSES**: ASSET (if goods/services qualify as asset)

**RECOGNITION (Credit entry)**

- Increase in equity (for equity-settled SBP)
- Liability (for cash-settled SBP)
Examples of impact of various conditions

Example: Award with market condition only

Illustration 1. Q. An entity granted share options to a director on the condition that the market price of the related shares increases by at least 15% each year over the next five years. At the end of year five, this target was not met.

Solution: The entity cannot reverse the expense recognized in the current or previous years and cannot revise the grant date fair value since the condition is market-based.

Example: Award with non-vesting condition only

Illustration 2. An entity grants share options to a director on the condition that the director does not compete with the reporting entity for a period of at least three years. The fair value of the award at the date of grant, including the effect of the ‘non-compete’ clause, is Rs. 150,000.

Solution: The ‘non-compete’ clause is a non-vesting condition, because the entity does not receive any services. On the grant date, the entity immediately recognizes a cost of Rs. 150,000, as the director is not providing any future services. The entity cannot reverse the expense recognized, even if the director goes to work for a competitor and loses the share options, because the condition is a non-vesting condition.

Example - Cash-settled awards

An entity grants 100 cash-settled awards to each of its 500 employees, on condition that the employees remain in its employment for the next three years. Cash is payable at the end of three years based on the share price of the entity’s shares on such date.

Year 1 - 35 employees leave. The entity estimates that 60 additional employees will leave during years 2 and 3 (i.e., the award will vest for 405 employees). The share price at year-end is Rs 40.

Year 2 - 40 employees leave and the entity estimates that 25 additional employees will leave during year 3 (i.e., the award will vest for 400 employees). The share price at year-end is Rs 50.

Year 3 - 22 employees leave, so that the award vests for 403 employees. The share price at year-end is Rs 52.

Example - Cash-settled awards

The entity recognizes the cost of this award as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Calculation of liability</th>
<th>Liability</th>
<th>Expense for Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>405 employees x 100 awards x Rs 40 x 1/3</td>
<td>5,40,000 (Cr)</td>
<td>5,40,000 (Dr)</td>
</tr>
<tr>
<td>2</td>
<td>400 employees x 100 awards x Rs 50 x 2/3</td>
<td>13,33,333 (Cr)</td>
<td>7,93,333 (Dr)</td>
</tr>
<tr>
<td>3</td>
<td>403 employees x 100 awards x Rs 52 x 3/3</td>
<td>20,95,600 (Cr)</td>
<td>7,62,267 (Dr)</td>
</tr>
</tbody>
</table>

Entry at the end of 3rd year (Final cash settlement)

Liability A/c Dr 20,95,600
To Cash Cr 20,95,600

Share-Based Payment Awards with a Cash Alternative

The accounting differs depending on whether the choice rests with the counterparty or the entity.

If counterparty has the right to choose the mode of settlement, then treat the award as a compound award. Split into a liability component (the counterparty’s right to demand settlement in cash) and an equity component (the counterparty’s right to demand settlement in shares). Once split, the entity accounts for the two components separately.
If entity has to choose then entity shall determine whether it has a present obligation to settle in cash treat the whole award as cash settled and account award as a liability or else account for the transaction as equity settled.

**Modification, Cancellation or Settlement**

**Modifications:**

Entity to recognize, the minimum services received measured at the grant date at fair value of the equity instruments granted, unless those equity instruments do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. This applies irrespective of any modifications to the terms and conditions on which the equity instruments were granted, or a cancellation or settlement of that grant of equity instruments.

The entity shall also recognize the effects of modifications that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee.

**Cancellation or Settlement:**

If a grant of equity instruments is cancelled or settled during the vesting period:

- Entity shall recognize immediately the amount that otherwise would have been recognized for services received over the remainder of the vesting period.
- Any payment made to the employee on the cancellation or settlement shall be accounted for as a deduction from equity, except to the extent that the payment exceeds the fair value of the equity instruments granted, measured at the repurchase date.
- If new equity instruments are granted to the employee and entity identifies the new equity instruments granted as replacement equity instruments for the cancelled equity instruments, the entity shall account for in the same way as a modification of the original grant of equity instruments.

**Disclosures:**

**IND AS 102 Requires Entities to disclose the following:**

- The type and scope of agreements existing during the reporting period.
- Description of agreements (settlement methods, vesting conditions, etc.).
- The number and weighted-average exercise price of share options by category (outstanding at the beginning of the reporting period and at the end of the reporting period, granted, vested, exercised and forfeited).
- Average share price of exercised options.
- Range of exercise prices and remaining contractual life of options outstanding at the end of the reporting period.
- Valuation method used to estimate the fair value of the awards (model and input values, etc.).
- The impact on the income statement (i.e., total expense) and the financial position (e.g., carrying amount of liabilities) of share-based payment awards.
Difference between IGAAP & Ind-AS 102

<table>
<thead>
<tr>
<th>IGAAP</th>
<th>IND-AS 102</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share-based payment to employees have an option to measure based on</td>
<td>Share-based payment to employees are measured based on the grant-date</td>
</tr>
<tr>
<td>the grant date fair value or intrinsic value of the equity instruments</td>
<td>fair value of the equity instruments issued. Intrinsic value approach is</td>
</tr>
<tr>
<td>issued.</td>
<td>permitted only when the fair value of the equity instruments cannot be</td>
</tr>
<tr>
<td></td>
<td>estimated reliably.</td>
</tr>
<tr>
<td>For measuring share-based payment to non-employees there is no specific</td>
<td>Share-based payment to employees are generally, measured based on the</td>
</tr>
<tr>
<td>guidance.</td>
<td>fair value of the goods or services received.</td>
</tr>
<tr>
<td></td>
<td>In case of graded vesting i.e. where share options or other equity</td>
</tr>
<tr>
<td></td>
<td>instruments granted vest in instalments over the vesting period, entity</td>
</tr>
<tr>
<td></td>
<td>may choose to measure on a straight-line basis as a single award or an</td>
</tr>
<tr>
<td></td>
<td>accelerated basis as though each separately vesting portion of the award</td>
</tr>
<tr>
<td></td>
<td>is a separate award.</td>
</tr>
<tr>
<td>In case of graded vesting i.e. where share options or other equity</td>
<td>Awards with graded vesting is measured as, in substance, multiple awards.</td>
</tr>
<tr>
<td>instruments granted vest in instalments over the vesting period,</td>
<td></td>
</tr>
<tr>
<td>entity may choose to measure on a straight-line basis as a single</td>
<td></td>
</tr>
<tr>
<td>award or an accelerated basis as though each separately vesting</td>
<td></td>
</tr>
<tr>
<td>portion of the award is a separate award.</td>
<td></td>
</tr>
</tbody>
</table>

LESSON ROUND UP

1. Equity-settled share-based payment transactions in which the entity receives goods or services and as consideration for equity instruments of the entity.
2. Cash-settled share-based payment transactions in which the entity receives goods or services and incurs a liability based on the price (or value) of the entity’s shares.
3. Grant date is defined as “the date on which the Company and employees agree to the terms of an employee share-based payment plan.
4. SBP arrangement is an agreement between the entity (or another group entity or any shareholder of any group entity) and another party that entitles the other party to receive.

SELF TEST QUESTIONS

1. What is SBP? And what is the Scope of SBP?
2. What is Grant Date and how it is determined?
3. How the date of receipt of Goods & Services impact Grant Date?
4. How recognition principle works in Ind AS 102?
5. What is modification, cancellation or settlement?
6. How Ind AS 102 is different from IGAAP?
Lesson 22
Method of Valuation

LESSON OUTLINE

- Method of Valuation
- Discounted Cash Flow Model
- Asset Approach
- Earning-Based Model
- Measuring Cost of Equity
  - CAPM
  - $\beta$: An indicator of systematic risk
  - Arbitrage Pricing Theory
- Economic Value Added
- Market Value Added
- Shareholder Value Added
- Equity Valuation Multiple
- Fair Market Value
- LESSON ROUND UP
- SELF TEST QUESTIONS

LEARNING OBJECTIVES

Valuation of any asset provides its true value or worth. An investor is always interested in knowing the intrinsic value or fair value of securities before taking any investment decision. Therefore, the valuation of securities becomes an integral part of security analysis. It can be based on accounting information (such as book value or liquidation value) or on the basis of discounted cash flow value.

The adjusted net asset method is commonly used for estimating the value of the business. The difference between the fair market value of the company’s total assets and the fair market value of its total liabilities determine the fair market value of the business. After going through the lesson, the students will be able to understand:

- Different methods of valuation
- Valuation as per Discounted Cash Flow Method
- Fair Market Value
- Capitalization of earning method
- Economic Value Added
- Shareholders Value Added
- Market Value Added
INTRODUCTION
Valuation of any asset provides its true value or worth. An investor is always interested in knowing the intrinsic value or fair value of securities before taking any investment decision. Therefore, the valuation of securities becomes an integral part of security analysis.

Valuation of securities can be based on accounting information (such as book value or liquidation value) or on the basis of discounted cash flow value.

METHODS OF VALUATION

(1) DISCOUNTED CASH FLOW MODEL (DCF)
This model calculates the value of an equity share as the total present value of all future expected cash inflow. The present value is calculated by using some appropriate discount rate or required rate of return on equity (Ke). This is the minimum required rate of return from the viewpoint of the prospective investor. The intrinsic value of share is also termed as the theoretical value of fair price. The actual price may be different from the intrinsic value of the share giving rise to investible opportunities. If market price is lower than its intrinsic value, then the share is undervalued or underpriced in the market. Such a share is a good buy. On the other hand, if the market price is greater than its intrinsic value, the share is overvalued or overpriced in the market. Such a share is not a good buy.

There can be two cases under DCF technique for valuation of an equity share:

(i) WHEN HOLDING PERIOD IS PRE-DECIDED OR FINE
An investor may decide to hold the share for a particular period of time; hence be would be selling it at some price at the end of the investment period. For the sake of simplicity here we can assume that the expected dividends every year and selling price at the end of holding period can be estimated in advance.

(a) ONE YEAR HOLDING PERIOD
When an investor wants to hold the share only for one year and tries to determine its fair price, he needs to make an estimate of year end dividend and selling price. Given these two, the fair value can be estimated using discounting rate (i.e., required rate of return from equity shares).

\[ P_0 = D_1 + \frac{P_1}{1 + Ke} \]

Where

\( P_0 \) = Present value of share (Fair value)
\( D_1 \) = Expected year end dividend
\( P_1 \) = expected year end selling price
\( Ke \) = Required rate of return

Illustration 1.
An investor wants to invest in the equity shares of XYZ Ltd for one year. The company is expected to declare a dividend of Rs 2 per share. Further a leading security analyst has projected the year end target price of this company’s share at Rs 120. Do you think the stock is a good buy now at Rs. 100? Assume that the required rate of return is 10%.

Solution.

\( D_1 = Rs 2 \)
\( P_1 = Rs 120 \)
Ke  = 10%
Po  = D1 + P1/1+ Ke
    = 2 + 120 / 1+ 0.10
    = Rs 110.9
    = Rs 111
Therefore, the fair price of share is Rs. 111. The investor should buy it at a current price of Rs 100.

(b) MULTIPLE YEARS HOLDING PERIOD

In such a case we need to calculate the total of present value of all expected future dividends and at the end of holding period the expected selling price.

\[ Po = D \times PVFA(Ke, n) + Pn \times PVF(Ke, n) \]

Where

- \( D \) = Expected dividend
- \( Pn \) = Expected selling price at the end of period \( n \)

Illustration 2.

An investor wants to invest in XYZ Ltd for five years. The company is expected to declare a dividend of Rs. 2 at the end of every year for five years. Further a leading analyst has projected the expected price of this company’s shares after five years would be Rs. 150. Do you think the stock is a good buy at Rs. 110 now? Assume that the required rate of return is 10%.

Solution:

\[ D1 = D2 = D3 = D4 = D5 = Rs 2 \]
\[ P5 = Rs 150 \]
\[ Ke = 10\% \]
\[ Po = D \times PVFA(Ke, n) + Pn \times PVF(Ke, n) \]
\[ = 2( PVFA 10\%, 5 ) + 150( PVF 10\%, 5 ) \]
\[ = 2(3.791) + 150(0.621) \]
\[ = 100.73 \]
Therefore, the fair price of the equity share is Rs. 100.73. The investor should not buy it at a current price of Rs. 110.

(2) ASSET APPROACH

An asset-based approach is a kind of business valuation that focuses on a company’s net asset value (NAV), or the fair market value of its total assets minus its total liabilities, to determine what it would cost to recreate the business. There is some room for interpretation in the asset approach in terms of deciding which of the company’s assets and liabilities to include in the valuation, and how to measure the worth of each.

The asset-based approach is best used when a business is non operating or has been generating losses, and the company’s focus is holding investments or real estate. The adjusted net asset method is commonly used for estimating the value of the business. The difference between the fair market value of the company’s total assets and the fair market value of its total liabilities determines the fair market value of the business. This technique also includes the value of all of the business’ intangible assets and liabilities, such as goodwill and pending litigation.
In this cost-based approach, the primary emphasis is placed upon the fair market value of the assets and liabilities of a business. As a result, this approach uses various methods that consider the value of individual assets and liabilities including intangible assets. The most well-known method in this approach relies upon the reported balance sheet assets and liabilities generally termed as book value. It should be recognized, however, as book-value concept. Assets are reported in accordance with various accounting conventions that may or may not accurately reflect fair market value.

It is further classified into:

(a) NET ASSET VALUE

The total value of the assets of a company less its liabilities is the net asset value. For the purpose of valuation, the usual thing to do is to divide the net assets by number of shares to get the net assets per share. This is the asset value which belongs to each share in the same way as the price-earning ratio measures the profit per share.

Net asset value is useful for shares valuation in sectors where the company value comes from the held assets rather than the stream of profit that was generated by the company business. The examples are property companies and investment trusts. Both are convenient ways wherein the investors can buy diversified bundles of the assets they hold.

The assets’ value can be obtained at book value or at market price and used depending on the circumstances and the sector. Some assets need to be excluded. One example of this is the tangible book value of NAV.

(b) PRICE TO BOOK MULTIPLE METHOD

The application of this method is similar to that of the P/E multiple method. Since the book value of equity is essentially the amount of equity capital invested in the firm, this method measures the market value of each dollar of equity invested.

This method can be used for

- companies in the manufacturing sector which have significant capital requirements.
- companies which are not in technical default (negative book value of equity).

The Price/Book Value Multiple of Comparable Company is arrived as follows:

Step 1- Weighted Average Market Price

Step 2- Divide by: Value per share as per Net assets Value

Step 3- Price/Book Value Multiple

(3) EARNING-BASED MODEL

The income-based method of valuations is based on the premise that the current value of any business is a function of the future value that an investor can expect to receive from purchasing all or part of the business. In other words, the value of the business must be related to the profits it will earn, and the cash it will generate in the future.

It includes

Capitalization of Earning Method

The capitalization method basically divides the business expected earnings by the so-called ‘capitalization rate’. The idea is that the business value is defined by the business earnings and the capitalization rate is used to relate the two. This method is more appropriate when it appears that a company’s current operations are
indicative of its future operations, assuming of course, a normal growth rate. Under this method a stable level of earnings is divided by the capitalization rate in order to arrive at an operating value for the entity. Where net earnings are being capitalized, the capitalization rate is the net earnings discount rate less the average sustainable growth rate.

\[
\text{Value} = \frac{\text{Net Operating Income}}{\text{Capitalization Rate}}
\]

Capitalization rate = discount rate – growth rate

(4) MEASURING COST OF EQUITY

The measurement of cost of capital of equity is the most typical and conceptually a difficult exercise. The reason being, there is no coupon rate in case of equity shares. Further, there is no commitment to pay equity dividend and it is the sole discretion of the directors to pay or not to pay dividend or to decide at what rate the dividend should be paid to the equity shareholders. Moreover, the equity shareholders are the last claimant on the profits of the company. Therefore, it is often said that the equity shares have no cost of capital as such. But it is not true. Like all other sources, it also has a cost.

The investors will invest the funds in the form of equity share capital of a firm, only if they expect a return from the firm, which will compensate them for surrendering their money as well as the risk they would undertake. The rate of discount at which the expected dividends are discounted to determine their present value is known as cost of equity share capital.

In case of equity share, the cost is to be viewed in the opportunity framework. The investor has provided funds to the firm to receive the combined return of dividends and appreciation in market value.

(A) CAPITAL ASSET PRICING MODEL (CAPM)

The relationship between risk and return established by the security market line is called the capital asset pricing model. It was developed in mid-1960s by three researchers, William Sharpe, John Lintner and Jan Mossin independently. It is basically a simple linear relationship. The higher the value of beta, the higher would be the risk of the security, therefore, the larger would be the return expected by the investors. In other words, all securities are expected to yield returns commensurate with their riskiness as measured by \( \beta \). This relationship is valid not only for individual securities, but is also valid for all portfolios, whether efficient or not.

CAPM shows how risky assets are priced in efficient capital market. It helps in the prediction of expected return on security or portfolio. The expected return determined through CAPM can be used to find out whether a security is earning more or less than expected return. From investment point of view an investor should select securities which provide higher return than the one expected by CAPM.

Total risk of a security comprises two components.

(i) Systematic Risk or Non-Diversifiable Risk

Systematic risk is the risk which is caused by factors beyond the control of specific company, such as general factors in the market, GDP, inflation, interest rates, tax policy, government policy, etc. These factors affect all the companies and cause variability in their returns. Systematic risk cannot be reduced by holding an efficiently diversified portfolio. Therefore, systematic risk is that part of total risk which cannot be eliminated by diversification.

Systematic risk of a security is indicated by beta coefficient \((\beta)\). \( \beta \) captures the sensitivity of a security’s return with respect to market return.
(ii) Unsystematic Risk or Diversifiable Risk

It is that part of total risk which is diversifiable. It is caused by factors which are within the control of a specific company, such as management, operational efficiency, labour conditions and financial leverage. The sources of unsystematic risk are business risk and financial risk. Securities which are less than perfectly and positively correlated can be combined together to diversify away unsystematic risk.

It can be observed that unsystematic risk can be reduced to zero in an efficiently diversified portfolio; hence the only relevant risk in such a portfolio is systematic risk.

As per CAPM there is a linear and positive relationship between expected return and systematic risk measured by $\beta$. CAPM is used to estimate expected return from a security or portfolio. $\beta$ measures the sensitivity of a security’s returns to the return of market portfolio. Some securities are less sensitive while others are more. Hence $\beta$ of different securities and portfolios are also different. Moreover, as discussed earlier unsystematic risk of a security can be diversified away, hence investor will not receive any return or risk premium for bearing unsystematic risk. The investor will receive risk premium only for the systematic risk identified by $\beta$.

Assumptions of CAPM

The capital asset pricing model is based on certain explicit assumptions regarding the behavior of investors. The assumptions are:

(a) Investors make their investment decisions on the basis of risk-return assessments measured in terms of expected returns and standard deviations of returns.

(b) The purchase or sale of a security can be undertaken in infinitely divisible units.

(c) Purchase and sales by single seller cannot affect prices. This means that there is perfect competition where investors determine prices by their actions.

(d) There are no transaction costs.

(e) There are no personal income taxes

(f) The investor can lend or borrow any amount of funds desired at a rate of interest equal to the rate for riskless securities.

(g) The investor can sell short any amount of any shares.

(h) Investors share homogeneity of expectations.

CAPM is stated as below

$$E(R_i) = R_f + (E(R_M) - R_f) \beta$$

Where

$E(R_i)$ = expected rate of return from a security

$R_f$ = Risk free return

$E(R_M)$ = expected return on market portfolio

$\beta$ = beta factor of security

As per CAPM

Expected Return = Risk Free Rate + Market Risk Premium x Systematic Risk

Expected Return = Risk Free Rate + Risk Premium
Expected Return = Reward for Time + Reward for Risk

Risk premium of a return can be calculated as the product of Market Risk premium and Systematic risk of a security.

Thus, we can say that the expected return from a security depends upon the following three factors:

(a) Risk free rate of return: This is the pure time value of money. It is the compensation an investor must get just for time without any assumption of risk.

(b) Market risk premium or the market price for risk: This is the reward an investor must get for bearing one unit of market risk or systematic risk.

(c) Amount of systematic risk indicated by β: This is the relative amount of systematic risk in a security. The higher the systematic risk, the higher will be the expected return.

It must be noted that risk free rate of return and market risk premium will be common for all the securities. Hence, the only factor that causes difference in expected return across various securities is β factor or systematic risk. The higher the systematic risk, the greater will be the expected return from that security.

**Uses of CAPM**

It is used to determine the expected or required rate of return from a security. Two important uses of CAPM are:

(a) In wealth management industry, CAPM is used to find out securities which are underpriced or overpriced; so that a prospective investor can make investment in underpriced security and an existing investor can sell overpriced securities.

(b) In capital budgeting decision in Financial Management, we calculate Weighted Average Cost of Capital (WACC) as the appropriate discount rate. An important component of WACC is cost of equity. CAPM is used to determine the cost of equity which is nothing but the required rate of return.

**Limitations of CAPM**

CAPM is a popular model for asset pricing or determination of expected return. However, it is criticized on following grounds:

(a) It is based on many simplified and unrealistic assumptions. In real life, securities are not infinitely divisible, there are transaction costs and taxes, unlimited lending and borrowing is not possible at a same risk free rate.

(b) The estimation of β factor is not a simplified task. We may calculate β using historical data. But past β values may not be valid in future. Hence β is not constant overtime. Hence any estimation error in β factor will result in incorrect estimation of expected return.

**Current Validity of CAPM**

The CAPM is generally appealing at an intellectual level, as it is logical and rational. Although its basic assumptions arise some doubts in the minds of the investors. Investment analyst have been creative in adapting CAPM for this use. The following points about CAPM should be noted:

(a) By focusing on the market risk, it makes the investors think about the riskiness of assets in general. It provides the basic concepts and these are of fundamental value.

(b) It is useful for the selection of securities and portfolios. Securities with higher returns are considered to be undervalued and attract buys. Overvalued securities, whose returns are lower than the normal return, are suitable for sale.
In the CAPM, it is believed that investors consider only market risk. Given the estimate of risk free rate, beta of the firm and required market rate of return, one can find out the expected return from firm’s security. This expected return can be used as an estimate of the cost of retained earnings.

Historical data regarding the market return, risk free rate of return and beta vary differently for different periods. The various methods used to estimate these inputs also affect the beta value. Since the inputs cannot be estimated precisely, the expected return determined through the CAPM model is also subject to criticisms.

### β: AN INDICATOR OF SYSTEMATIC RISK

In an efficiently diversified portfolio, i.e., Market Portfolio, there is no unsystematic risk. All unsystematic risks have been diversified. Hence, the total risk of market portfolio comprises systematic risk. It implies that as per CAPM, the only risk which is priced in the market is systematic risk and not unsystematic risk.

β is an indicator of systematic risk of a security. It measures the sensitivity of a security’s return with respect to market return. It is an index or a number which shows whether a security is less sensitive or more sensitive to market return. The more sensitive (or responsive) a security’s return is to market return, the higher will be the value of β.

- If a security has β< 1 then it is less responsive to changes in market returns.
- If a security has β> 1 then the security is more responsive to changes in market returns.
- A risk free asset is not responsive to changes in market returns and hence the β of a risk free asset is always 0.
- The β of market portfolio is always 1. This is because here we are relating market portfolio with itself, and therefore it must be 1.

β of a security can be calculated as

$$\beta = \frac{\text{Cov}(S,M)}{\sigma_{M}^2}$$

where

- $\text{Cov}(S, M)$ = covariance between returns of security S and market return
- $\sigma_{M}^2$ = variance of market returns or simply market variance

Both σ and β are measures of risk. But they are also different and capture different measures of risks. Standard deviation is the indicator of total risk, whereas beta is an indicator of systematic risk.

### Illustration 3.

Following information is available in respect of a security G and the market portfolio M

<table>
<thead>
<tr>
<th>Probabilities</th>
<th>Security G</th>
<th>Market portfolio M</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>0.4</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>0.5</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>

Find out β of security G.
Solution:

<table>
<thead>
<tr>
<th>Pi</th>
<th>G</th>
<th>M</th>
<th>PiG</th>
<th>PiM</th>
<th>Pi(G-exp G)2</th>
<th>Pi(M-exp M)2</th>
<th>P_i(G-exp G)(M-exp M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3</td>
<td>10</td>
<td>12</td>
<td>3</td>
<td>3.6</td>
<td>1.2</td>
<td>2.7</td>
<td>1.8</td>
</tr>
<tr>
<td>0.4</td>
<td>12</td>
<td>15</td>
<td>4.8</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0.5</td>
<td>14</td>
<td>18</td>
<td>4.2</td>
<td>5.4</td>
<td>1.2</td>
<td>2.7</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Mean Return of G = 12%
Mean market return = 15%
Variance of G = 2.4
Variance of M = 5.4
Covariance = 3.6
\[ \beta = \frac{\text{Cov}}{\text{Market variance}} \]
\[ = \frac{3.6}{5.4} = 0.67 \]

Illustration 4.
You are given the following information about two securities P and Q:

<table>
<thead>
<tr>
<th>Security</th>
<th>P</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual return (%)</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>B</td>
<td>0.6</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Risk free rate is 7% and expected return on market portfolio is 17%. Do you think securities P and Q are efficiently priced in market.

Solution:
Return as per CAPM
\[ E(R_i) = R_f + (E(R_M) - R_f) \beta \]
Expected return from P = 7 + (17 - 7)(0.7) = 15%
Expected return from Q = 7 + (17 - 7)(1.6) = 23%
Since actual return of Q is same as expected return under CAPM, therefore, security Q is efficiently priced.
The actual return of P is lower than the expected return under CPM, therefore, it is inefficiently priced.

Illustration 5.
The risk free rate is 4.5 %, return on broad market index is 17% and beta of security L is 1.1. Find out the expected return from the security if the actual return provided is 20%.
If expected return of security S is 22.5%, what must be its beta if it is correctly priced in the market.
Solution:

Using CAPM

\[ E(R) = R_f + (E(RM) - R_f) \beta \]

Expected Return on L = 4.5 + (17 - 4.5) (1.1) = 18.25%

Hence the expected return from security L is 18.25%. If the actual return is 20%, the security L is under priced in the market.

Now, for security S

\[ E(R_s) = 22.5\% \]

If it correctly priced then

\[ 22.5 = 4.5 + (17 - 4.5) (\beta) \]

\[ \beta = 1.44 \]

Hence the beta of security must be 1.44 if it is correctly priced in the market.

Illustration 6.

The risk free rate is 6%, return on a broad market index is 18%. The actual return provided by the security is 20%. What must be its beta if the security is:

(a) Correctly priced in the market
(b) Overpriced in the market
(c) Underpriced in the market

Solution:

Using CAPM

\[ E(R) = R_f + (E(RM) - R_f) \beta \]

(a) When security is correctly priced its actual return must be same as its expected return as per CAPM

Therefore,

\[ 20 = 6 + (18 - 6) (\beta) \]

\[ \beta = 1.167 \]

(b) When security is overpriced it means that its expected return as per CAPM is higher than the actual return. Hence beta of security must be higher than 1.167 as calculated above.

(c) When security is underpriced it means that its expected return as per CAPM is lower than the actual return. Hence, beta of security must be lower than 1.167 as calculated above.

(B) Arbitrage Pricing Theory

Arbitrage refers to the process of earning profit by taking advantage of different pricing for the same asset. The process generates risk-free profit. In the security market, it involves selling a security at a high price and the simultaneous purchase of the same security at a relatively lower price. Since the profit earned through arbitrage is risk free, investors have the incentive to undertake whenever the opportunity rises. In general, some investors indulge more in this type of activity than others. However, the buying and selling activities of arbitrageur reduces and eliminates the profit margin, bringing the market price to an equilibrium level.

Arbitrage Pricing Theory (APT) is a general theory of asset pricing that holds that the expected return of a
financial asset can be modeled as a linear function of various macro-economic factors or theoretical market indices, where sensitivity to changes in each factor is represented by a factor-specific beta coefficient. The model-derived rate of return will then be used to price the asset correctly—the asset price should equal the expected end of period price discounted at the rate implied by the model. If the price diverges, arbitrage should bring it back into line.

In the APT context, arbitrage consists of trading in two assets – with at least one being mispriced. The arbitrageur sells the asset, which is relatively too expensive, and uses the proceeds to buy one which is relatively too cheap.

Under the APT, an asset is mispriced if its current price diverges from the price predicted by the model. The asset price today should equal the sum of all future cash flows discounted at the APT rate, where the expected return of the asset is a linear function of various factors, and sensitivity to changes in each factor is represented by a factor-specific beta coefficient.

A correctly priced asset here may be in fact a synthetic asset - a portfolio consisting of other correctly priced assets. This portfolio has the same exposure to each of the macroeconomic factors as the mispriced asset. The arbitrageur creates the portfolio by identifying correctly priced assets (one per factor plus one) and then weighting the assets in a way that portfolio beta per factor is the same as for the mispriced asset.

When the investor has bigger the asset and short the portfolio is smaller (or vice versa), he has created a position which has a positive expected return (the difference between asset return and portfolio return) and which has a net-zero exposure to any macroeconomic factor and is therefore risk free (other than for firm specific risk). The arbitrageur is thus in a position to make a risk-free profit:

The APT along with the Capital Asset Pricing Model (CAPM) is one of two influential theories on asset pricing. The APT differs from the CAPM in that it is less restrictive in its assumptions. It allows for an explanatory (as opposed to statistical) model of asset returns. It assumes that each investor will hold a unique portfolio with its own particular array of betas, as opposed to the identical “market portfolio”. In some ways, the CAPM can be considered a “special case” of the APT in that the securities market line represents a single-factor model of the asset price, where beta is exposed to changes in value of the market.

The APT was a revolutionary model because it allows the user to adapt the model to the security being analyzed. And as with other pricing models, it helps the user decide whether a security is undervalued or overvalued and so he or she can profit from this information. APT is also very useful for building portfolios because it allows managers to test whether their portfolios are exposed to certain factors.

APT may be more customizable than CAPM, but it is also more difficult to apply because determining which factors influence a stock or portfolio takes a considerable amount of research. It can be virtually impossible to detect every influential factor much less determine how sensitive the security is to a particular factor. But getting “close enough” is often good enough; in fact studies have found that four or five factors will usually explain most of a security’s return: surprises in inflation, GNP, investor confidence and shifts in the yield curve.

The Arbitrage pricing theory based model aims to do away with the limitations of one-factor model (CAPM) that different stocks will have different sensitivities to different market factors which may be totally different from any other stock under observation. In layman terms, one can say that not all stocks can be assumed to react to single and same parameter always; hence the need to take multifactors and their sensitivities.

Additionally, the APT can be seen as a “supply-side” model, since its beta coefficients reflect the sensitivity of the underlying asset to economic factors. Thus, factor shocks would cause structural changes in assets' expected returns, or in the case of stocks, in firms' profitabilities.

On the other hand, the capital asset-pricing model is considered a “demand side” model. Its results, although similar to those of the APT, arise from a maximization problem of each investor’s utility function, and from the resulting market equilibrium (investors are considered to be the “consumers” of the assets).
The APT formula is:

\[ E(r_j) = r_f + b_{1j}R_{1} + b_{2j}R_{2} + b_{3j}R_{3} + b_{4j}R_{4} + \ldots + b_{nj}R_{n} \]

where:

- \( E(r_j) \) = the asset’s expected rate of return
- \( r_f \) = the risk-free rate
- \( b_{ij} \) = the sensitivity of the asset’s return to the particular factor
- \( R_{i} \) = the risk premium associated with the particular factor

As the formula shows, the expected return on the asset/stock is a form of linear regression taking into consideration many factors that can affect the price of the asset and the degree to which it can affect it, i.e., the asset’s sensitivity to those factors.

If one is able to identify a single factor which singly affects the price, the CAPM model shall be sufficient. If there are more than one factors affecting the price of the asset/stock, one will have to work with a two-factor model or a multifactor model depending on the number of factors that affect the stock price movement for the company.

**Effect of Arbitrage on The Price**

To buy stock A and B the investor has to sell stock C. The buying pressure on stock A and B would lead to increase in their prices. Conversely, selling of Stock C will result in fall in the price of stock C. At lower price, there would be a rise in the expected return of stock C.

For example, if stock C at the price of Rs. 100 per share earns 12% return, at Rs 80 the return would be \( \frac{12}{80} \times 100 = 15\% \). At the same time, return rates would decline in stock A and B with the rise in price. This buying and selling activity will continue until all arbitrage possibilities are eliminated. At this juncture, an approximate linear relationship arises between expected returns and sensitivities.

**Arbitrage Pricing Theory Assumptions**

- The theory is based on the principle of capital market efficiency, and hence assumes all market participants trade with the intention of profit maximization.
- It assumes no arbitrage exists and if it occurs participants will engage to benefit out of it and bring back the market to an equilibrium level.
- It assumes markets are frictionless, i.e., there are no transaction costs, no taxes, short-selling is possible and an infinite number of securities is available.

**Arbitrage Pricing Theory Benefits**

- APT model is multifactor. So, the expected return is calculated taking into account various factors and their sensitivities that might affect the stock price movement. Thus, it allows selection of factors that affect the stock price largely and specifically.
- APT model is based on arbitrage free pricing or market equilibrium assumptions which to a certain extent result in a fair expectation of the rate of return on the risky asset.
- APT based multifactor model places emphasis on the covariance between asset returns and exogenous factors, unlike CAPM. CAPM places emphasis on the covariance between asset returns and endogenous factors.
- APT model works better in multiperiod cases as against CAPM which is suitable for single period cases only.
APT can be applied to the cost of capital, and capital budgeting decisions.

The APT model does not require any assumption about the empirical distribution of the asset returns, unlike CAPM which assumes that stock returns follow a normal distribution system. Thus APT is a less restrictive model.

**Arbitrage Pricing Theory Limitations**

- The model requires short-listing of factors that impact the stock under consideration. Finding and listing all factors can be a difficult task and runs a risk of some or the other factor being ignored. Also, the risk of accidental correlations may exist which may cause a factor to become substantial impact provider or vice versa.
- The expected returns for each of these factors will have to be arrived at, which depending on the nature of the factor, may or may not be easily available always.
- The model requires calculating sensitivities of each factor which again can be an arduous task and may not be practically feasible.

The factors that affect the stock price for a particular stock may change over a period of time. Moreover, the sensitivities associated may also undergo shifts which need to be continuously monitored making it very difficult to calculate and maintain.

Arbitrage Pricing Theory-based models are built on the principle of capital market efficiency and aim to provide decision makers and participants with estimates of required rate of return on the risky assets. The required rate of return arrived using the APT model can be used to evaluate, if the stocks are overpriced or underpriced. Empirical tests conducted in the past have resulted from APT as a superior model over CAPM in many cases. However, in several cases, it has arrived at similar results as CAPM model, which is relatively simpler in use.

**Comparison Between the CAPM and the APT**

APT may be informative from medium to long term, but are not considered to be accurate in the short term. The CAPM, on the other hand, is a snapshot, and appears to be more accurate in the short term than it is in the long term.

The APT focuses on risk factors rather than assets, so it has an advantage over the CAPM in that it does not have to create an equivalent portfolio to assess risk.

The CAPM assumes that there is a linear relationship between the assets, whereas the APT assumes that there is a linear relationship between risk factors. This means that where there no linear relationship exists, the models are unable to adequately predict the outcomes.

However, both the CAPM and the APT make relatively unrealistic assumptions in that assets are freely available and desirable, there are no costs incurred in the acquisition of assets and that all investors tend to think alike and come to the same conclusions. This seems intuitively contradictory, as the most successful investors are likely to be those who are able to spot potential which has remained unnoticed by the market as a whole. Indeed, when all investors do think alike, a ‘bubble’ can be created which inflates the asset price and downplays the risks inherent in the asset. In this circumstance, assessing the risk of an asset based on the mood of the market is likely to be far more risky than can be predicted by either the CAPM or the APT. Theoretically, therefore, it could be argued that using a CAPM or APT analysis is likely to increase the propensity for ‘bubbles’ to emerge, as they are using static predictions of behaviour by investors.

**ECONOMIC VALUE ADDED**

A concept critical in evaluating the performance of any business is economic value added. In generic terms, value added refers to the additional or incremental value created by an activity or a business venture. Economic
value added is a refinement of this concept – it measures the economic rather than accounting profit created by a business after the cost of all resources including both debt and equity capital have been taken into account.

Economic value added (EVA) is a financial measure of what economists sometimes refer to as economic profit or economic rent. The difference between economic profit and accounting profit is essentially the cost of equity capital – an accountant does not subtract a cost of equity capital from the computation of profit, so in fact an accountant’s measure of income or profit is in essence the residual return to that equity capital since all other costs have been deducted from the revenue stream. In contrast, an economist charges for all resources in his computation of profit – including an opportunity cost for the equity capital invested in the business – so an economist’s definition and computation of the profit is net above the cost of all resources.

How to Calculate Economic Value Added (EVA)

Note that, as in the traditional computation of earnings, interest on debt capital is subtracted from operating earnings (Earnings Before Interest and Taxes (EBIT)) to obtain net income. Then, an opportunity cost on equity capital is subtracted to obtain EVA. The opportunity cost on equity capital is computed as the cost of equity capital – an accountant does not subtract the cost of equity capital from the computation of profit, so in fact an accountant’s measure of income or profit is in essence the residual return to that equity capital since all other costs have been deducted from the revenue stream. In contrast, an economist charges for all resources in his computation of profit – including an opportunity cost for the equity capital invested in the business – so an economist’s definition and computation of the profit is net above the cost of all resources.

The tables below give an example of how to calculate ‘Economic Value Added (EVA)’. 

Earnings before Interest and Taxes (EBIT) xxx
Less: Interest xxx
Net Income xxx
Less: Cost of Equity Capital xxx
Economic Value Added (EVA) xxx

Expressed as a formula:

EVA = “Net Operating Profit after Taxes” – (Equity Capital X % Cost of Equity Capital).

Illustration 7.

Balance Sheet of ABC Limited
as at 31st March, 2017

I. EQUITY AND LIABILITIES Rs.

1. Shareholder’s Funds
   Equity 40,00,000

2. Non-Current Liabilities
   Long Term Debt 60,00,000

3. Current Liabilities
   (a) Account Payables 2,08,000
   (b) Bank Overdrafts 4,84,000
   TOTAL 1,06,92,000
II ASSETS

1. Non-current assets
   (a) Fixed Assets  1,00,00,000

2. Current Assets
   (a) Inventories
      (i) Raw Material  86,400
      (ii) Finished Goods  1,71,360
   (b) Account receivable  4,29,300
   (c) Cash  4,940
   TOTAL  1,06,92,000

Statement of Profit of ABC Limited

Sales  28,62,000
Less: Operating Expenses  11,48,400
EBIT  17,13,600
Less: Tax Expenses  6,85,440
NOPAT  10,28,160

The average rate of return on similar types of companies is 20% while risk free return is 12.5%. Rate of return as charged by bank is 18% and the tax rate is 40%.

Calculate Economic Value Added.

Solution.

Step 1: Calculation of Capital Employed

<table>
<thead>
<tr>
<th>Amount</th>
<th>Expected Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>40,00,000</td>
</tr>
<tr>
<td>Long Term Debt</td>
<td>60,00,000</td>
</tr>
<tr>
<td>Bank Overdrafts</td>
<td>4,84,000</td>
</tr>
<tr>
<td>Total capital employed</td>
<td>1,04,84,000</td>
</tr>
</tbody>
</table>

Step 2: Calculation of Weighted Average Cost of Capital (WACC)

\[
\text{WACC} = \frac{13,02,272}{1,04,84,000} = 12.42\%
\]
Step 3:

Economic Value Added = NOPAT - Weighted average cost of capital * Capital Employed

= Rs 10,28,160 - Rs 13,02,272

= Rs 2,74,112

What insight does EVA provide about financial performance of a business?

First, like any financial measure, the trend may be more valuable than the absolute value of EVA. Even if EVA is positive, a declining EVA suggests that financial performance is deteriorating over time, and if this trend continues EVA will become negative and financial performance unacceptable. A negative EVA indicates that the firm is not compensating its capital resources adequately, and corrective action should be considered if this negative EVA persists over time.

Corrective action to improve EVA

1. First, operating performance with respect to operating profit margins or asset turnover ratios could be improved to generate more revenue without using more capital.
2. Second, the capital invested in the business might be reduced by selling under-utilized assets; this strategy will simultaneously improve operating performance through a higher asset turnover ratio, as well as a reduced capital charge against those earnings because of a reduced debt or equity capital investment.
3. Third, redeploy the capital invested to projects and activities that have higher operating performance than the current projects or investments are exhibiting.
4. And fourth, if the business is not highly leveraged, change the capital structure by substituting lower cost debt for higher cost equity. Although this last strategy will decrease net income because of the higher interest cost, it will improve the EVA of the business because the total cost of debt and equity is reduced, and EVA measures the value created after all costs of capital (debt and equity) have been taken into account.

Advantages of EVA Analysis

1. In various cases, company pay bonuses to the employees on the basis of EVA generated. Since a higher EVA implies higher bonuses to the employees, it motivates the employees for to work hard for generating higher revenue.
2. Using EVA, company can evaluate the projects independently and hence decide on whether to execute the project or not.
3. It helps the company in monitoring the problematic areas and hence taking corrective actions to resolve those problems.
4. Unlike accounting profit, such as EBIT, Net Income and EPS, EVA is based on the idea that a business must cover both the operating costs as well as the capital costs and hence it presents a better and true picture of the company to the owners, creditors, employees, shareholders and all other interested parties.
5. It also helps the owners of the company to identify the best person to run the company effectively and efficiently.

However, there are some disadvantages of EVA like it is difficult to compute and also it does not take into account
inflation into its calculation. Therefore, company should take into account above advantages and disadvantages before deciding whether to implement EVA or not.

(6) MARKET VALUE ADDED

Value-based management and shareholder value analysis have been popular concepts since find, but with the change of time newer related concepts such as MVA have started getting importance.

Market value added is the difference between the company’s market and book value of shares. According to Stern Stewart, if the total market value of a company is more than the amount of capital invested in it, the company has managed to create shareholder value. If the market value is less than capital invested, the company has destroyed shareholder value.

Market Value Added = Company’s total Market Value – Capital Invested

With the simplifying assumption that market and book value of debt are equal, this is the same as

Market Value Added = Market Value of equity – Book value of equity

Book value of equity refers to all equity equivalent items like reserves, retained earnings and provisions. In other words, in this context, all the items that are not debt (interest bearing or non-interest bearing) are classified as equity.

Market value added (MVATM) is identical in meaning with the market-to-book ratio. The difference is only that MVA is an absolute measure and market-to-book ratio is a relative measure. If MVA is positive, that means that market-to-book ratio is less than one. According to Stewart Market value added tells us how much value the company has added to, or subtracted from, its shareholders investment. Successful companies add their MVA and thus increase the value of capital invested in the company. Unsuccessful companies decrease the value of the capital originally invested in the company. Whether a company succeeds in creating MVA or not, depends on its rate of return. If a company’s rate of return exceeds its cost of capital, the company will sell on the stock market with premium compared to the original capital. On the other hand, companies that have rate of return smaller than their cost of capital sell with discount as compared to the original capital invested in. The company. Whether a company has positive or negative MVA depends on the rate of return compared to the cost of capital.

Market value added can also be defined in relation to Economic Value Added (EVATM). EVA measures whether the operating profit is enough compared to the total cost of capital employed.

Stewart defines EVA as the surplus of Net Operating Profit after Taxes (NOPAT) after adjusting for capital cost, where

\[ \text{EVA} = (\text{ROI} - \text{WACC}) \times \text{Capital employed} \]

He further defines the connection between EVA and MVA as: Market Value Added = Present Value of All future EVA by increasing EVA, a company increases its market value added or in other words increases the difference between company’s value and the amount of capital invested in it.

The relationship of MVA with EVA has its implication on valuation. By rearranging the formula, market value of equity can be defined as:

Market value of equity = Book value of equity + Present value of all future EVA.

(7) SHAREHOLDER VALUE ADDED (SVA)

Shareholder Value Added (SVA) represents the economic profits generated by a business above and beyond the minimum return required by all providers of capital. “Value” is added when the overall net economic cash flow of the business exceeds the economic cost of all the capital employed to produce the operating profit.
Therefore, SVA integrates financial statements of the business (profit and loss, balance sheet and cash flow) into one meaningful measure.

The SVA approach is a methodology which recognizes that equity holders as well as debt financiers need to be compensated for the bearing of investment risk. The SVA methodology is a highly flexible approach to assist management in the decision-making process. Its applications include performance monitoring, capital budgeting, output pricing and market valuation of the entity.

### Benefits of Adopting SVA

To create value, management must have an understanding of the variables that drive the value of the business. An organization cannot act directly on value. It has to act on factors it can influence, such as client satisfaction, cost, capital expenditures, the debt / equity mix and so forth. Through an understanding of these drivers of value, management is able to establish a consistent dialogue, both internally and with the shareholders, regarding what needs to be accomplished to create value.

The benefits of moving towards SVA include:

1. Overall, value-based performance measures will result in greater accountability for the investment of new capital, as well as for the use of existing investments.
2. Organization will have the opportunity to apply a meaningful private sector benchmark to evaluate performance.
3. Managers will be provided with an improved focus on maximizing shareholder value.

### Drawbacks of Adopting SVA

1. A limitation in the use of SVA as a performance measure is that, by nature, it is an aggregate measure. In order to analyze the underlying causes of any changes in calculated value between years, it is necessary to fully comprehend the value drivers and activities specific to a given firm.
2. There may be certain enterprises which are subject to any degree of price regulation then it may not be possible for the management to adjust output prices to achieve a commercial return in response to upward movements in input prices. Such a situation may result in SVA being reduced even though there may have been no decrease in overall efficiency.
3. Similarly, a reduction in direct Government funding would result in a decrease in SVA.
4. Combined with the use of traditional accounting measures, a thorough knowledge of the value drivers of the business will assist in determining the underlying causes of fluctuations in the value added measure.
5. Again, the use of SVA is not a substitute for detailed analysis of business drivers, rather it is an additional measurement tool with an economic foundation.

### EQUITY VALUATION MULTIPLES

Equity price-based multiples are most relevant where investors acquire minority positions in companies. Care should be used when comparing companies with very different capital structures. Different debt levels will affect equity multiples because of the gearing effect of debt. In addition, equity multiples will not explicitly take into account balance sheet risk.
<table>
<thead>
<tr>
<th>Multiple</th>
<th>Definition</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/E ratio</td>
<td>Share price / Earnings per share (EPS). EPS is net income/weighted average no of shares in issue. EPS may be adjusted to eliminate exceptional items (core EPS) and/or outstanding dilutive elements (fully diluted EPS).</td>
<td>• Most commonly used equity multiple. • Data is availability in abundance.</td>
<td>• EPS can be subject to differences in accounting policies and manipulation. • Unless adjusted, can be subject to one-off exceptional items. • Cannot be used if earnings are negative.</td>
</tr>
<tr>
<td>Price / cash earnings</td>
<td>Share price / earnings per share plus depreciation amortization and changes in non-cash provisions.</td>
<td>• Cash earnings are a rough measure of cash flow. • Unaffected by differences in accounting for depreciation.</td>
<td>• Incomplete treatment of cash flow. • Usually used as a supplement to other measures if accounting differences are material.</td>
</tr>
<tr>
<td>Price / book ratio</td>
<td>Share price / book value per share.</td>
<td>• Can be useful where assets are a core driver of earnings such as capital-intensive industries. • Most widely used in valuing financial companies, such as banks, because banks have to report accurate book values of their loans and deposits, and liquidation value is equal to book value since deposits and loans are liquidated at same value as the reported book values.</td>
<td>• Book values for tangible assets are stated at historical cost, which is not a reliable indicator of economic value. • Book value for tangible assets can be significantly impacted by differences in accounting policies.</td>
</tr>
<tr>
<td>PEG ratio</td>
<td>Prospective PE ratio / prospective average earnings growth.</td>
<td>• Most suitable when valuing high growth companies.</td>
<td>• Requires credible forecasts of growth • Can understate the higher risk associated with many high-growth stocks.</td>
</tr>
<tr>
<td>Multiple</td>
<td>Formula</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Dividend yield</td>
<td>Dividend per share / share price.</td>
<td>• Useful for comparing cash returns with types of investments. • Can be used to establish a floor price for a stock.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dependent on distribution policy of the company. • Yield to investor is subject to differences in taxation between jurisdictions. • Assumes the dividend is sustainable.</td>
<td></td>
</tr>
<tr>
<td>Price / Sales</td>
<td>Share price / sales per share.</td>
<td>• Easy to calculate. • Can be applied to loss making firms. • Less susceptible to accounting differences than other measures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mismatch between nominator and denominator in formula (EV/Sales is a more appropriate measure). • Not used except in very broad, quick approximations.</td>
<td></td>
</tr>
</tbody>
</table>

Among all the multiples, the most commonly used is Price-Earning multiple. Fair price or intrinsic value of a share can be calculated on the basis of P/E multiplier.

\[
P/E = \frac{\text{Current Price per share}}{\text{EPS}}
\]

There are three approaches for determining the P/E ratio for a company.

(i) **Average P/E Ratio**

In this approach one may calculate average P/E ratio of the company using historical P/E ratios. When historical P/E ratios are not highly fluctuating then mean may be used to calculate average, otherwise median P/E ratio is a good estimate of the expected P/E ratio.

(ii) **Using Regression Analysis**

We may also relate a firm's historical P/E ratio to market P/E ratio overtime using time series regression analysis. The estimated relationship will be in the form of:

\[
PE_i = 1 + b \times PEM
\]

Where

- \( PE_i \) = P/E ratio of firm i
- \( PEM \) = P/E ratio of market index
- \( b \) = slope coefficient

(iii) **Relate P/E Ratio of a Company to its Broad Determinants**

A number of research studies have been conducted to determine the factors affecting P/E ratio of a company. These determinants are growth in earnings, risk, dividend policy, etc.

As per Whitebeck Kisor (1963) model the following relationship is obtained.

\[
P/E = 8.2 + 1.5 \times (\text{Earning growth rate}) + 0.067 \times (D/P \text{ ratio}) - 0.20 \times (S.D \text{ in growth rate})
\]

As per this model, higher growth, higher dividend and lower risk leads to higher P/E ratio.
Illustration 8.
The relevant details of the company are:
Annual Turnover = Rs 50,00,000
Operating Profit = 20%
Equity share capital = Rs 20,00,000
(FV Rs 100)
Capital Reserve = Rs 5,00,000
12% Preference share capital = Rs 20,00,000
10% Term Loans = Rs 10,00,000
12% debentures = Rs 10,00,000
Tax Rate = 30%
Dividend Payout Ratio = 50%
P/E Ratio = 30
Find out
(a) EPS
(b) Dividend per share
(c) Market price
(d) Earning yield
(e) Dividend yield
Solution:
Sales = Rs 50,00,000

Operating Profit 10,00,000
Less: Interest on loan (1,00,000)
Interest on Debentures (1,20,000)
Profit before tax 7,80,000
Less: Tax @ 30% (2,34,000)
Profit after tax 5,46,000
Less: Preference Dividend (2,40,000)
Profit for Equity shareholders 3,06,000

No. of equity shares 20,000

EPS = \[
\frac{\text{Profit for equity shareholders}}{	ext{No. of equity shares}}
\]
= 3,06,000
= 5,30
DPS = 50% of 15.30 = 7.65
Market Price = P/E ratio x EPS = 30 x 15.30 = 459
Earning Yield = EPS / Market Price
= 15.30 / 459 = 3.33%
Dividend Yield = DPS / Market Price
= 7.65 / 459 = 1.67

Illustration 9.
A management consulting company is expecting to pay a dividend of Rs. 12 per share at the end of the year.
The dividends have been growing @ 10% per annum and this growth rate is expected to continue. The equity
capitalization rate is 12%. Assume that the share is fairly priced in the market. Find out the implicit P/E ratio if
the EPS of the company is Rs. 20.

Solution:
Share is fairly priced in the market
implies that market price = intrinsic value
Hence, Intrinsic Value = 12 / (0.12 – 0.10)
= Rs. 600
Therefore, the current market price of share is Rs. 600
Now, P/E ratio = Market Price / EPS
= 600 / 20
= 30
Hence, the implicit P/E ratio is 30

Illustration 10.
DCL Ltd is expected to declare a dividend of Rs. 5 at the end of the current year. The earnings of the company
are growing at 10% p.a. Find out the intrinsic value of the share if the required rate of return is 15%. If the current
market price is equal to the intrinsic value then what is the expected price after one year? If an investor buys
the share now and sells it after one year after receiving dividends what is his dividend yield and holding period
return.

Solution:
D1 = 5
g = 10%
intrinsic value (Po) = D1 / Ke – g
= 5 / 0.15 - 0.10
= Rs 100
If the market price is same as intrinsic value of Rs 100, then after one year the price will be
P1 = D2 / Ke – g
Since , D2 = D1(1 + g) we can calculate P1 as below
P1 = Po (1 + g)
= 100 (1.10)
= 110

Now, after one year the investor will get a dividend of Rs 5 and would be able to sell the share at Rs 110.

Hence, Dividend Yield = 5 / 100 = 5%
Capital Gain Yield = (110 – 100) / 100
= 10%
Holding Period Return = (5 + 10) / 100
= 15%

(9) FAIR MARKET VALUE (FMV)

Fair market value (FMV) is, in its simplest expression, the price that a person reasonably interested in buying a given asset would pay to another person why is reasonably interested in selling it at market place. To establish FMV, it must be assumed that prospective buyers and sellers are reasonably knowledgeable about the asset, that they are behaving in their own best interests, and they are free of undue pressure to trade, and a reasonable time period is given to them for completing the transaction.

Book value is the price paid for a particular investment or asset. Fair market value, on the other hand, is the current price at which that same asset can be sold. Book value and fair market value can work together to help investors determine how much they stand to gain or lose by selling off assets.

This method is an average of the values obtained on earning basis and net asset basis. This method attempts to minimize the demerits of earning basis as well as net asset basis method.

Value per share = value as per Earning basis + value as per Net Asset basis / 2

Illustration 11.

From the following information and the balance sheet of A Ltd as on 31st March, 2017 find the value of its equity shares by fair value method:

(a) Buildings are now worth Rs. 3,50,000.
(b) Profits of last three years have shown an annual increase of Rs 50,000. The annual transfer to reserve is 25% of the net profit.
(c) Preference shares are preferred as to capital and dividend.
(d) Normal rate of return expected is 15%.
A Ltd.

Balance Sheet as on 31st March, 2017

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount (Rs.)</th>
<th>Assets</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000, 8% preference shares of Rs 100 each, fully paid up</td>
<td>4,000,000</td>
<td>Building</td>
<td>70,000</td>
</tr>
<tr>
<td>4,000,000</td>
<td>Furniture</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>equity shares of Rs 100 each, fully paid up</td>
<td></td>
<td>Stock (Market Value)</td>
<td>4,50,000</td>
</tr>
<tr>
<td>Reserves</td>
<td>4,00,000</td>
<td>Investments at cost</td>
<td>3,35,000</td>
</tr>
<tr>
<td>Surplus</td>
<td>1,50,000</td>
<td>(Face Value Rs 4,00,000)</td>
<td></td>
</tr>
<tr>
<td>Balance on 01.04.16</td>
<td>80,000</td>
<td>Debtors</td>
<td>2,80,000</td>
</tr>
<tr>
<td>Add: Surplus for 4,30,000</td>
<td>5,10,000</td>
<td>Bank</td>
<td>60,000</td>
</tr>
<tr>
<td>(before transfer to reserves)</td>
<td></td>
<td>Preliminary expenses</td>
<td>10,000</td>
</tr>
<tr>
<td>Creditors</td>
<td>48,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12,08,000</td>
<td></td>
<td>12,08,000</td>
<td></td>
</tr>
</tbody>
</table>

Solution:

**Intrinsic Value Method**

<table>
<thead>
<tr>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
</tr>
<tr>
<td>Furniture</td>
</tr>
<tr>
<td>Stock</td>
</tr>
<tr>
<td>Investments</td>
</tr>
<tr>
<td>Debtors</td>
</tr>
<tr>
<td>Bank</td>
</tr>
<tr>
<td>Total Assets</td>
</tr>
<tr>
<td>Less: Creditors</td>
</tr>
<tr>
<td><strong>Net Assets</strong></td>
</tr>
<tr>
<td>Less: Preference shareholders</td>
</tr>
<tr>
<td><strong>Amount available</strong></td>
</tr>
</tbody>
</table>

**For Equity**

Value per share = 13,30,000 / 4,000

= 332.50
Yield Method

Profit for 16-17 4, 30,000
Add: Expected increase 50,000
Less: Transfer to
Reserves 1,20,000
Available profits 3,60,000
Less: Preference Dividend 8,000
Profit available for 3,52,000

Equity dividend

Return on Equity = \[ \frac{3,52,000}{4,00,000} \times 100 = 88\% \]

Value per share = Rate of dividend expected / NRR x paid up value of share
= 88 / 15 x 100
= Rs 586.67

Fair market value
= Rs 332.50 + Rs 586.67 / 2
= Rs 459.58

LEARNING ROUND UP

- Valuation of any asset provides its true value or worth.
- Discounted Cash Flow Model calculates the value of an equity share as the total present value of all future expected cash inflows. The present value is calculated by using some appropriate discount rate or required rate of return on equity (Ke). This is the minimum required rate of return from the viewpoint of the prospective investor.
- An asset-based approach is a type of business valuation that focuses on a company’s net asset value (NAV), or the fair-market value of its total assets minus its total liabilities, to determine what it would cost to recreate the business.
- Net asset value is useful for shares valuation in sectors where the company’s value comes from the held assets rather than the stream of profit that was generated by the company business.
- The investors will invest the funds in the form of equity share capital of a firm, only if they expect a return from the firm, which will compensate them for surrendering the funds as well as the risk undertaken. The rate of discount at which the expected dividends are discounted to determine their present value is known as cost of equity share capital.
- CAPM shows how risky assets are priced in efficient capital market. It helps in the prediction of expected return on security or portfolio. The expected return determined through CAPM can be used to find out whether a security is earning more or less than expected return. From investment point of view an investor should select securities which provide higher return than the one expected by CAPM.
As per CAPM there is a linear and positive relationship between expected return and systematic risk measured by $\beta$.

$\beta$ is an indicator of systematic risk of a security. It measures the sensitivity of a security’s return with respect to market return. It is an index or a number which shows whether a security is less sensitive or more sensitive to market return.

Under the APT, an asset is mispriced if its current price diverges from the price predicted by the model.

The APT along with the capital asset pricing model (CAPM) is one of two influential theories on asset pricing.

Economic value added (EVA) is a financial measure of what economists sometimes refer to as economic profit or economic rent.

Market value added is the difference between the company's market rate and book value of shares. According to Stern Stewart, if the total market value of a company is more than the amount of capital invested in it, the company has managed to create shareholders' value. If the market value is less than capital invested, the company has destroyed shareholders’ value.

Shareholder Value Added (SVA) represents the economic profits generated by a business above and beyond the minimum return required by all providers of capital. The SVA approach is a methodology which recognizes that equity holders as well as debt financiers need to be compensated for the bearing of investment risk.

Book value is the price paid for a particular investment or asset. Fair market value, on the other hand, is the current price at which that same asset can be sold.

**SELF TEST QUESTIONS**

1. What do you mean by Economic Value Added. How is EVA related to valuation?
2. Write a short note on
   (a) CAPM
   (b) Systematic Risk
   (c) APT
3. What do you mean by diversification? Does it reduce the risk of an investment? Explain with an example.
4. Differentiate between CAPM and APT.
5. If the risk-free return is 7%, expected return on BSE Sensex is 16% and risk measurement by standard deviation of BSE Index is 8%, how would you construct an efficient portfolio to produce an expected return of 12% and what would be its risk? (Ans : 4.44%)
6. The risk-free rate is 6%, return on a broad market index is 19%, the actual return provided by the security is 20%. What must be its beta if the security is
   (a) Correctly priced in the market
   (b) Overpriced in the market
   (c) Underpriced in the market

   (a. 1.08 b. >1.08 c. <1.08)
7. An investor wants to invest in XYZ Ltd for five years. The company is expected to declare a dividend of Rs 2 at the end of every year for five years. Further, a leading analyst has projected the expected price of this company’s shares after five years would be Rs 150. Do you think the stock is a good buy at Rs 110 now? Assume that the required rate of return is 10%.

8. A security has a standard deviation of 5%. The correlation coefficient of the security with the market is 0.70 and the market standard deviation is 4%. The return from the government securities is 10% and from the market portfolio is 15%. What is the required return on the security? (Ans: 14.375%)
WARNING

It is brought to the notice of all students that use of any malpractice in Examination is misconduct as provided in the explanation to Regulation 27 and accordingly the registration of such students is liable to be cancelled or terminated. The text of regulation 27 is reproduced below for information:

“27. Suspension and cancellation of examination results or registration

In the event of any misconduct by a registered student or a candidate enrolled for any examination conducted by the Institute, the Council or the Committee concerned may suo motu or on receipt of a complaint, if it is satisfied that, the misconduct is proved after such investigation as it may deem necessary and after giving such student or candidate an opportunity to state his case, suspend or debar the person from appearing in any one or more examinations, cancel his examination result, or studentship registration, or debar him from future registration as a student, as the case may be. Explanation - Misconduct for the purpose of this regulation shall mean and include behaviour in a disorderly manner in relation to the Institute or in or near an Examination premises/centre, breach of any regulation, condition, guideline or direction laid down by the Institute, malpractices with regard to postal or oral tuition or resorting to or attempting to resort to unfair means in connection with the writing of any examination conducted by the Institute”.
EXECUTIVE PROGRAMME
CORPORATE AND MANAGEMENT ACCOUNTING

TEST PAPER

(This Test Paper is for recapitulate and practice for the students. Students need not to submit responses/answers to this test paper to the Institute.)

Time Allowed : 3 Hours Maximum Marks : 100

PART I

(CORPORATE ACCOUNTING) (60 MARKS)

1. (i) R Ltd. had issued 5,000, 12% debentures of Rs. 100 each in 2015. It had Rs. 5.00 lacs worth of debentures outstanding as on 01.04.2017. Interest on Debentures is payable on 30 June and 31 December every year. The company purchased the debentures for immediate Cancellation

   On 01.06.2017  400 Debenture @ Rs. 97 cum-interest
   On 01.11.2017  200 Debenture @ Rs. 96 ex-interest
   On 01.12.2017  400 Debenture @ Rs. 99 ex-interest

   Journalise for the year 2017-18. Financial year is the calendar year.

(ii) Sam Limited invited applications from public for 1,00,000 equity shares of Rs. 10 each a premium of Rs. 5 per share. The entire issue was underwritten by the underwriters Anita, Babita, Chavi and David to the extent of 30%, 30%, 20% and 20% respectively with the provision of firm underwriting of 3,000, 2,000, 1,000 and 1,000 shares respectively. The underwriters were entitled to the maximum commission permitted by law.

   The company received applications for 70,000 shares from public out of which applications for 19,000, 10,000; 21000 and 8,000 shares were marked in favor of Anita, Babita, Chavi and David respectively.

   Calculate the liability of each one of the underwriters. Also ascertain the underwriting commission @ 2.5% payable to the different underwriters.

(iii) Analysis and interpretation of Financial Statement refers to the treatment of the information contained in the income statement and balance sheet so as to afford full diagnosis of profitability and financial soundness of the business. Discuss.

(iv) What are the contents Corporate Governance Report?

   (5 Marks each)

   Answer all parts of Q. No.2 or 2A

2. (i) From the following Balance Sheets of a holding company and its subsidiary on 31 March 2017, prepare Consolidated Balance Sheet.
### Liabilities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital</td>
<td>16,00,000</td>
<td>6,00,000</td>
<td>Goodwill</td>
<td>90,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Shares Of Rs. 10 Each</td>
<td>2,40,000</td>
<td>2,10,000</td>
<td>Machinery</td>
<td>10,00,000</td>
<td>4,50,000</td>
</tr>
<tr>
<td>General Reserve</td>
<td>2,70,000</td>
<td>1,50,000</td>
<td>Stock</td>
<td>2,40,000</td>
<td>1,50,000</td>
</tr>
<tr>
<td>P&amp;L Account</td>
<td>1,50,000</td>
<td>1,20,000</td>
<td>Debtors</td>
<td>3,60,000</td>
<td>4,80,000</td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td>70,000</td>
<td>30,000</td>
<td>Cash and Bank</td>
<td>70,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Outstanding Expenses</td>
<td>70,000</td>
<td>30,000</td>
<td>Investments : 48,000 shares in S Ltd</td>
<td>5,70,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23,30,000</td>
<td>11,40,000</td>
<td>Total</td>
<td>23,30,000</td>
<td>11,40,000</td>
</tr>
</tbody>
</table>

When control was acquired B Ltd. had Rs. 1,20,000 in general reserve and Rs. 90,000 in profit and loss account. Immediately on purchase of shares, A Ltd. received Rs. 48,000 as dividend from B Ltd. which was credited to profit and loss account. Debtors of A Ltd. include Rs. 60,000 due from B Ltd. whereas creditors of B Ltd. include Rs. 45,000 due to A Ltd., the difference being accounted for by a cheque-in-transfer.

(8 Marks)

2. (ii) The following information has been extracted from the books of account of ABC Ltd. as at 31st March, 2017:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration Expenses</td>
<td>4,80,000</td>
<td></td>
</tr>
<tr>
<td>Cash at Bank and on Hand</td>
<td>2,28,000</td>
<td></td>
</tr>
<tr>
<td>Cash Received on Sale of Fittings</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Long Term Loan</td>
<td></td>
<td>70,000</td>
</tr>
<tr>
<td>Investments</td>
<td>2,00,000</td>
<td></td>
</tr>
<tr>
<td>Depreciation on Fixtures, Fittings, Tools and Equipment (1st April, 2016)</td>
<td>2,60,000</td>
<td></td>
</tr>
<tr>
<td>Distribution Costs</td>
<td>1,02,000</td>
<td></td>
</tr>
<tr>
<td>Factory Closure Costs</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>Fixtures, Fittings, Tools and Equipment at Cost</td>
<td>6,80,000</td>
<td></td>
</tr>
<tr>
<td>Profit &amp; Loss Account (at 1st April, 2016)</td>
<td>80,000</td>
<td></td>
</tr>
<tr>
<td>Purchase of Equipment</td>
<td>1,20,000</td>
<td></td>
</tr>
<tr>
<td>Purchases of Goods for Resale</td>
<td>17,10,000</td>
<td></td>
</tr>
<tr>
<td>Sales (net of Excise Duty)</td>
<td></td>
<td>30,00,000</td>
</tr>
<tr>
<td>Share Capital (1,00,000 shares of Rs. 10 each fully paid)</td>
<td>10,00,000</td>
<td></td>
</tr>
<tr>
<td>Stock (at 1st April, 2016)</td>
<td>1,40,000</td>
<td></td>
</tr>
<tr>
<td>Trade Creditors</td>
<td></td>
<td>80,000</td>
</tr>
<tr>
<td>Trade Debtors</td>
<td>7,80,000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,50,000</td>
<td>45,00,000</td>
</tr>
</tbody>
</table>

Additional Information:

1. The stock at 31st March, 2017 (valued at the lower of cost or net realizable value) was estimated to be worth Rs. 2,00,000.

2. Fixtures, fittings, tools and equipment all related to administration. Depreciation is charged at a
rate of 20% per annum on cost. A full year’s depreciation is charged in the year of acquisition, but no depreciation is charged in the year of disposal.

(3) During the year to 31st March, 2017, the Company purchased equipment of Rs. 1,20,000. It also sold some fittings (which had originally cost Rs. 60,000) for Rs. 10,000 and for which depreciation of Rs. 30,000 had been set aside.

(4) The average Income tax for the Company is 50%. Factory closure cost is to be presumed as an allowable expenditure for Income tax purpose.

(5) The company proposes to pay a dividend of 20% per Equity Share.

Prepare ABC Ltd.’s Profit and Loss Account for the year to 31st March, 2017 and balance Sheet as at that date in accordance with the Companies Act, 2013 in the Vertical Form. 

(8 Marks)

OR

2A (i) From the following Balance Sheets of a holding company and its subsidiary on 31 March 2017, prepare Consolidated Balance Sheet.

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>H Ltd. Rs.</th>
<th>S Ltd. Rs.</th>
<th>Assets</th>
<th>H. Ltd. Rs.</th>
<th>S Ltd. Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td></td>
<td></td>
<td>Goodwill</td>
<td>180,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Shares of Rs. 10 each</td>
<td>3000000</td>
<td>1200000</td>
<td>Machinery</td>
<td>1800000</td>
<td>900000</td>
</tr>
<tr>
<td>General reserve</td>
<td></td>
<td></td>
<td>Stock</td>
<td>480000</td>
<td>300000</td>
</tr>
<tr>
<td>P&amp;L Account</td>
<td>480000</td>
<td>360000</td>
<td>Debtors</td>
<td>720000</td>
<td>960000</td>
</tr>
<tr>
<td>Sundry Creditors</td>
<td>540000</td>
<td>420000</td>
<td>Cash and Bank</td>
<td>120,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Outstanding expenses</td>
<td>300000</td>
<td>240000</td>
<td>Investments :</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>120,000</td>
<td>60,000</td>
<td>96000 shares in S Ltd</td>
<td>1140000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4440000</td>
<td>2280000</td>
<td>Total</td>
<td>4440000</td>
<td>2280000</td>
</tr>
</tbody>
</table>

Additional Information:

(i) When control was acquired S Ltd. had Rs.12,40,000 in General Reserve and Rs.1,80,000 in Profit And Loss Account.

(ii) At the time of purchase H Ltd. received Rs.96,000 as dividend from S Ltd. which was credited to Profit And Loss Account.

(iii) Debtors of H Ltd, include Rs.1,20,000 due from S Ltd. whereas creditors of S Ltd. include Rs.90,000 due to H Ltd and the difference being accounted for by a cheque-in-transfer.

2A.(ii)

A Ltd.

BALANCE SHEET as at 31st March, 2017

<table>
<thead>
<tr>
<th>I. EQUITIES AND LIABILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholders' Funds</td>
</tr>
<tr>
<td>(a) Share Capital</td>
</tr>
<tr>
<td>(b) Reserve &amp; Surplus</td>
</tr>
<tr>
<td>2. Non-Current Liability</td>
</tr>
</tbody>
</table>
Long term borrowings 4,00,000
3. Current Liability
Trade payables 60,000
**TOTAL** 21,65,000

**II. ASSETS**

1. Non-current assets
(a) Fixed Assets
(i) Tangible fixed assets 13,30,000
(b) Non Current Investment 1,50,000

2. Current Assets
Inventories 1,00,000
Trade receivables 1,00,000
Cash and cash equivalents Balance 4,85,000 6,85,000
**TOTAL** 21,65,000

**Notes**

1. Share Capital
Authorized Share Capital

Issued, Subscribed Called Up And Paid-Up Share Capital:-
1,00,000 shares of 10 each fully paid-up 10,00,000

2. Reserve and Surplus
Securities Premium 2,00,000
General Reserve 5,05,000 7,05,000

3. Long Term Borrowings
14% Debentures 4,00,000

4. Tangible Fixed assets
Land and Building 9,30,000
Plant and Machinery 3,50,000
Furniture and Fitting 50,000 13,30,000

On 1st April, 2017 the shareholders of the company have approved the scheme of buy-back of equity shares as under:

(i) 5% of the equity shares would be bought back at Rs. 15.

(ii) 12% Debentures to be issued for Rs. 10,000 to finance the buy back and balance from General reserve may be utilised for this purpose.

(iii) Premium paid on buy back of shares should be met from securities premium account.

(iv) Investments would be sold for Rs. 2,75,000.

Pass journal entries to record the above transactions and prepare the Balance Sheet of the company immediately after the buy-back of shares.
3. (i) From the following condensed comparative Balance Sheets of Hotel Hills Ltd. and additional information, prepare a Cash Flow Statement for the year 2017.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital</td>
<td>7,000</td>
<td>8,000</td>
<td>Plant &amp; Machinery</td>
<td>6,200</td>
<td>6,600</td>
</tr>
<tr>
<td>Share Premium</td>
<td>900</td>
<td>1,100</td>
<td>Accumulation Dep. on Plant &amp; Machinery</td>
<td>(3,700)</td>
<td>(2,620)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>2,382</td>
<td>3,082</td>
<td>Building</td>
<td>9,500</td>
<td>11,600</td>
</tr>
<tr>
<td>7% Mortgage loan</td>
<td>--</td>
<td>2,000</td>
<td>Accumulation Dep. on Building</td>
<td>(4,300)</td>
<td>(4,500)</td>
</tr>
<tr>
<td>Creditors</td>
<td>690</td>
<td>600</td>
<td>Land</td>
<td>1,000</td>
<td>1,200</td>
</tr>
<tr>
<td>Outstanding salaries</td>
<td>200</td>
<td>140</td>
<td>Stock</td>
<td>1,022</td>
<td>962</td>
</tr>
<tr>
<td>Provision for taxation</td>
<td>100</td>
<td>140</td>
<td>Debtors</td>
<td>860</td>
<td>760</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prepaid expenses</td>
<td>72</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cash</td>
<td>618</td>
<td>980</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11,272</td>
<td>15,062</td>
<td><strong>Total</strong></td>
<td>11,272</td>
<td>15,062</td>
</tr>
</tbody>
</table>

Additional information:

I. Plant costing Rs. 1600 (accumulated depreciation Rs. 1480) was sold during the year for Rs. 120.

II. Building was acquired during the year at a cost of Rs. 2100. In addition to cash payment of Rs. 100 a 7% mortgage loan was raised for the balance.

III. Dividend of Rs. 800 was paid during the year.

IV. A sum of Rs. 1390 was transferred to provision for taxation account in 2017.

(8 Marks)

3.(ii)

Balance Sheet of ABC Ltd.
as at 31st March, 2017

I. EQUITY AND LIABILITIES

<table>
<thead>
<tr>
<th></th>
<th>₹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shareholder’s Funds</td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>40,00,000</td>
</tr>
<tr>
<td>2. Non-Current Liabilities</td>
<td></td>
</tr>
<tr>
<td>Long Term Debt</td>
<td>60,00,000</td>
</tr>
<tr>
<td>3. Current Liabilities</td>
<td></td>
</tr>
<tr>
<td>(a) Account Payables</td>
<td>2,08,000</td>
</tr>
<tr>
<td>(b) Bank Overdrafts</td>
<td>4,84,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,06,92,000</td>
</tr>
</tbody>
</table>
ASSETS

1. Non-current assets
   (a) Fixed Assets 1,00,00,000

2. Current Assets
   (a) Inventories
      (i) Raw Material 86,400
      (ii) Finished Goods 1,71,360
   (b) Account receivable 4,29,300
   (c) Cash 4,940
   TOTAL 1,06,92,000

Statement of Profit of ABC Ltd.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>28,62,000</td>
</tr>
<tr>
<td>Less: Operating Expenses</td>
<td>11,48,400</td>
</tr>
<tr>
<td>EBIT</td>
<td>17,13,600</td>
</tr>
<tr>
<td>Less: Tax Expenses</td>
<td>6,85,440</td>
</tr>
<tr>
<td>NOPAT</td>
<td>10,28,160</td>
</tr>
</tbody>
</table>

The average rate of return on similar types of companies is 20% while risk free return is 12.5%. Rate of return as charged by bank is 18% and the tax rate is 40%.

Calculate Economic Value Added. (8 Marks)

4. (i) Mr. Surya Pratap was appointed as Managing Director of Pila Industries Ltd. for a period of five years with effect from 01.04.2013 on a salary of Rs.12 lakhs per annum with other perquisites. The Board of directors of the company on coming to know of certain questionable transactions, terminated the services of the Managing Director from 01.03.2016. Mr. Surya Pratap termed his removal as illegal and claimed compensation from the company. Meanwhile the company paid a sum of Rs. 5 lakhs on ad hoc basis to Mr. Surya Pratap pending settlement of his dues. Discuss whether:
   a) The company is bound to pay compensation to Mr. Surya Pratap and, if so, how much?
   b) The company can recover the amount of Rs. 5 lakhs paid on the ground that Mr. Surya Pratap is not entitled to any compensation, because he is guiding of corrupt practice? (4 Marks)

4. (ii) Explain the minimum disclosure of notes and explanatory statement that should be made in interim financial report as per AS-25. (4 Marks)
PART II

MANAGEMENT ACCOUNTING AND VALUATION (40 MARKS)

5. (i) An investor wants to invest in XYZ Ltd for five years. The company is expected to declare a dividend of Rs. 2 at the end of every year for five years. Further, a leading analyst has projected the expected price of this company's shares after five years would be Rs. 150. Do you think the stock is a good buy at Rs. 110 now? Assume that the required rate of return is 10%.

5. (ii) The relevant details of the company are:

- Annual Turnover = Rs. 50,00,000
- Operating Profit = 20%
- Equity share capital = Rs. 20,00,000
- Capital Reserve = Rs. 5,00,000
- 12% Preference share capital = Rs. 20,00,000
- 10% Term Loans = Rs. 10,00,000
- 12% debentures = Rs. 10,00,000
- Tax Rate = 30%
- Dividend Payout Ratio = 50%
- P/E Ratio = 30

Find out

(a) EPS
(b) Dividend per share
(c) Market price
(d) Earning yield
(e) Dividend yield

5. (iii) The Companies (Cost records & audit) rules, 2014 provides exemption from cost audit to a company which is covered under rule 3, and whose revenue from exports, in foreign exchange, exceeds seventy five per cent of its total revenue. How to determine the percentage to total revenue in the given cases:

(a) In a company who is manufacturing Pharmaceutical products, the revenue from export of pharmaceutical products earned in foreign exchange divided by total revenue including other income etc. is 58%.

(b) The revenue in foreign exchange earned from export of pharmaceutical products plus revenue in foreign exchange earned from rendering of research & development service divided by total revenue including other income etc. is 82%.

5 (iv) “Reporting is an essential means for cost control.” Comment on this statement and state what types of reports you would consider necessary in regard to advertisement cost? (5 Marks each)
6. (i) Rayan Pvt. Ltd, was a new comer in small manufacturing firm of formals and casuals wears. Product range includes, Shirts and T-Shirts (Full & Half sleeves), trousers and jeans, cargo's, etc.

Whenever a firm is newly introduced it is a burden on the Finance Manager for deciding the Accounting method for maintaining books of Account in a factory.

By considering all the factors determining cost, such as cost structure, condition of market, type of consumer, area of distribution, capacity of supply, product’s demand & supply, improvement in the quality of the product etc. Manager has to decided to follow the Cost Accounting for maintaining factory A/c or Manufacturing A/c. Cost Accounting does not includes physical stock-taking, but it includes detailed & relevant cost figure of closing stock, raw material, work-in-progress and Finished Goods. Cost accounting helped the manager to find out most suitable and accurate cost per unit. These also helped him to avoid – material wastages, use of obsolete machinery, poor planning, etc.

They took control over material, labour and overhead expenses, and started discussing day-to-day operations of business, so they can take remedial actions. Moreover, introduction of a cost reduction programme combined with operational research and value analysis leads to improvement in economic as well as financial condition of the firm.

Answer all the following questions.

(a) According to you, by adopting Cost Accounting method, Can a firm prepare a Financial Statement?

(b) Which kind of operating policy decision can we take by using Cost Accounting Method? (5 Marks)

6. (ii) The following particulars are available in relation to X Ltd. (5 Marks)

(i) Capital : 4500, 8% Preference shares of Rs. 100 each fully paid and 50,000 Equity shares of Rs. 10 each fully paid

(ii) External liabilities : Rs. 50,000

(iii) Reserves and Surplus : Rs. 50,000

(iv) The average expected profit (after taxation) earned by the company: Rs. 1,05,000

(v) The normal profit earned on the market value of equity shares (fully paid) of the same type of companies is 10%

(vi) 10% of the profits after tax is transferred to reserves.

Calculate the intrinsic value per equity share and value per share according to dividend yield basis. Assume that out of total assets, assets worth Rs. 4,000 are fictitious. (5 Marks)

Or

6A. (i) Calculate working capital turnover ratio from the following information:

Current ratio = 5:3
Quick ratio = 3:5
Inventory turnover ratio = 5 times
Closing Stock was Rs. 1,92,000 less than opening stock
Gross profit = 25% on cost
Average debt collection period = 3 months

Cash sales = 25% of Total sales

Opening debtors = Rs. 2,80,000

Closing debtors = Rs. 3,20,000

6A. (ii) The Balance Sheet of RNR Limited as on 31.12.2017 is as follows:

(Rupees in lacs)

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount</th>
<th>Assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,00,000 equity shares of Rs. 10 each fully paid</td>
<td>10</td>
<td>Fixed assets</td>
<td>15</td>
</tr>
<tr>
<td>1,00,000 equity shares of Rs. 6 each, fully paid up</td>
<td>6</td>
<td>Intangible assets (market value)</td>
<td>3</td>
</tr>
<tr>
<td>Reserves and Surplus</td>
<td>4</td>
<td>Miscellaneous expenditure to the extent not written off</td>
<td>2</td>
</tr>
<tr>
<td>Liabilities</td>
<td>10</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Fixed assets are worth Rs. 24 lakhs. Other Tangible assets are revalued at Rs. 3 lakhs. The company is expected to settle the disputed bonus claim of Rs. 1 lakh not provided for in the accounts. Goodwill appearing in the Balance Sheet is purchased goodwill. It is considered reasonable to increase the value of goodwill by an amount equal to average of the book value and a valuation made at 3 years’ purchase of average super-profit for the last 4 years.

After tax, profits and dividend rates were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>PAT (Rs. in Lakhs)</th>
<th>Dividend %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>3.0</td>
<td>11%</td>
</tr>
<tr>
<td>2015</td>
<td>3.5</td>
<td>12%</td>
</tr>
<tr>
<td>2016</td>
<td>4.0</td>
<td>13%</td>
</tr>
<tr>
<td>2017</td>
<td>4.1</td>
<td>14%</td>
</tr>
</tbody>
</table>

Normal expectation in the industry to which the company belongs is 10%.

Akbar holds 20,000 equity shares of Rs. 10 each fully paid and 10,000 equity shares of Rs. 6 each, fully paid up. He wants to sell away his holdings.

(i) Determine the break-up value and market value of both kinds of shares.

7. Zenith Company Ltd had signed a new contract with the Union provides that all weekly work in excess of 44 hours will be paid at a time and a half, and that in excess of 48 hours shall be paid at double time. A special Puja Bonus will also be paid for each worker depending upon the number of full weeks worked by him since the last Puja. A job order cost system is in vogue. The Cost Accountant proposes to charge the extra payments to jobs or overheads as under:

All extra payments for overtime and Puja bonus to workmen whose wages are directly allocated to jobs are to be charged to the jobs concerned, while all other payments are to be charged to the jobs concerned, while all other payments are to be charged to overheads.
The factory manager wants all the extra payments to be treated as overheads. The sales manager wants all such expenses to be excluded from costs, as they represent policy costs.

As a cost consultant, you are required to suggest the best method to be followed. The company accepts 70% orders on a cost plus 20% basis and others at factory cost plus variable mark up. Give your answer in the form of a report to the Managing Director. (5 Marks)

7. (i) From the following information and the Balance Sheet of A Ltd as on 31st March, 2017 find the value of its equity shares by fair value method.

(a) Buildings are now worth Rs. 3,50,000
(b) Profits of last three years have shown an annual increase of Rs. 50,000. The annual transfer to reserve is 25% of the net profit.
(c) Preference shares are preferred as to capital and dividend
(d) Normal rate of return expected is 15%

A Ltd.

Balance Sheet as on 31st March, 2017

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount</th>
<th>Assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000, 8% preference shares of Rs. 100 each, fully paid up</td>
<td>1,00,000</td>
<td>Building</td>
<td>70,000</td>
</tr>
<tr>
<td>4,000, equity shares of Rs. 100 each, fully paid up</td>
<td>4,00,000</td>
<td>Furniture</td>
<td>3,000</td>
</tr>
<tr>
<td>Reserves &amp; Surplus</td>
<td>1,50,000</td>
<td>Stock (Market Value)</td>
<td>4,50,000</td>
</tr>
<tr>
<td>Balance on 01.04.16</td>
<td>80,000</td>
<td>5,10,000</td>
<td>Investments at cost</td>
</tr>
<tr>
<td>Add: Surplus for 2016-17</td>
<td>4,30,000</td>
<td>(Face Value Rs. 4,00,000)</td>
<td></td>
</tr>
<tr>
<td>(before transfer to reserves)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creditors</td>
<td>48,000</td>
<td>Debtors</td>
<td>2,80,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bank</td>
<td>60,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preliminary expenses</td>
<td>10,000</td>
</tr>
<tr>
<td>Total</td>
<td>12,08,000</td>
<td>Total</td>
<td>12,08,000</td>
</tr>
</tbody>
</table>

7. (ii) The following Balance Sheet of X Ltd. is given:

Balance Sheet
as on 31st March, 2013

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQUITIES AND LIABILITIES</td>
<td></td>
</tr>
<tr>
<td>Shareholder’s Funds</td>
<td></td>
</tr>
<tr>
<td>5,000 shares of ₹ 100 each fully paid</td>
<td>50,00,000</td>
</tr>
<tr>
<td>Profit and Loss Appropriation A/c</td>
<td>21,20,000</td>
</tr>
<tr>
<td>CURRENT LIABILITIES</td>
<td></td>
</tr>
<tr>
<td>Bank overdraft</td>
<td>18,60,000</td>
</tr>
<tr>
<td>Trade Payables</td>
<td>21,10,000</td>
</tr>
</tbody>
</table>
Provision for taxation | 5,10,000
---|---
**Total** | 1,16,00,000

**Assets**

<table>
<thead>
<tr>
<th>Non Current Assets</th>
<th>4,00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodwill</td>
<td></td>
</tr>
<tr>
<td>Land and building at cost</td>
<td>32,00,000</td>
</tr>
<tr>
<td>Plant and machinery at cost</td>
<td>28,00,000</td>
</tr>
</tbody>
</table>

**Current Assets**

<table>
<thead>
<tr>
<th>Trade Receivables</th>
<th>20,00,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock</td>
<td>32,00,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,16,00,000</td>
</tr>
</tbody>
</table>

The Loss/Profit for each of the last 5 years was:

- **2008-2009**: ₹ (5,50,000);
- **2009-2010**: ₹ 9,82,000;
- **2010-2011**: ₹ 11,70,000;
- **2011-2012**: ₹ 14,50,000;
- **2012-2013**: ₹ 17,00,000;

Although income-tax has so far been paid @ 40% and the above profits have been arrived at on the basis of such tax rate, it has been decided that with effect from the year 2012-2013 the Income-tax rate of 45% should be taken into consideration. 10% dividend in 2008-2009 and 2009-2010 and 15% dividend in 2010-2011 and 2011-2012 have been paid. Market price of shares of the company on 31st March, 2013 is Rs. 125. With effect from 1st April, 2013 Managing Director’s remuneration has been approved by the Government to be Rs. 8,00,000 in place of Rs. 6,00,000. The company has been able to secure a contract for supply of materials at advantageous prices. The advantage has been valued at Rs. 4,00,000 per annum for the next five years.

On the basis of information given, ascertain goodwill at 3 year’s purchase of super profit (for calculation of future maintainable profit weighted average is to be taken). \( (5 \text{ Marks}) \)