

GUIDELINE ANSWERS

PROFESSIONAL PROGRAMME

JUNE 2021 SESSION

MODULE 2



**THE INSTITUTE OF
Company Secretaries of India**

भारतीय कम्पनी सचिव संस्थान

IN PURSUIT OF PROFESSIONAL EXCELLENCE

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The Guideline Answers contain the information based on the Laws/Rules applicable at the time of preparation. However, students are expected to be well versed with the amendments in the Laws/Rules made upto **six** months prior to the date of examination.

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PROFESSIONAL PROGRAMME EXAMINATION

JUNE 2021

INFORMATION TECHNOLOGY AND SYSTEMS AUDIT

Time allowed : 3 hours

Maximum marks : 100

NOTE: Answer **ALL** Questions.

Question 1

ABC Ltd., is renowned company in Supply Chain Management (SCM) sector in India. Company has many clients across India and Globe. The company provides wide range of SCM solutions which integrate functions such as manufacturing and distribution by managing the information, material flow, financials etc. In order to serve its customers, the company has various offices across major cities in India and also abroad. Due to some Global Pandemic, the authorities in India decide for complete lockdown across the country for a brief period to contain the spread of pandemic. Accordingly, ABC Ltd., decides that all the employees of the company should work from home. The company has well established Intranet and Extranet, providing access to its employees and controlled access to outside customers and collaborators. In order to manage the information and material flow among its SCM partners, the company is using computerised Management Information System (MIS). The company is using Microsoft Dynamics ERP software to take care of company operations and employee establishment issues. This ERP system was adopted by the company for its business specific requirement, after proper analysis of essential qualities required for its business. Accordingly, the company with its robust IT infrastructure has been able to properly safeguard its operations in such situations and emerged as a leader in SCM sector.

Based on the above, attempt the following :

- (a) Briefly discuss any five (05) essential qualities which are required in ERP system selection.*
- (b) Explain any two (02) ERP solutions offered by Microsoft Dynamics.*
- (c) Even though MIS system helps a lot in managing business information, still it has certain limitations. Mention any five (05) such limitations.*
- (d) Briefly discuss any of the five (05) important strategies necessary for success of Extranet. (5 marks each)*

Answer 1(a)

Many decision makers have purchased ERP software only to find out later that it was not the right fit for their specific business. Although there is plenty of information available to aid in the Enterprise Resource Planning (ERP) systems selection process. The essential qualities required are as under:

1. Functionality

This is the most important characteristic of an ERP system to research. In order to know what functions your selected system is required to possess, you

first need to ask yourself what areas are most important to you. If your ERP software is optimized for larger companies and you are a small business, you should look into a system that more represents your specific needs.

2. Common Platform with Wide Recognition

Choosing a commonly accepted cloud based ERP platform will ensure there is a high amount of products and support available for those products. Well recognized ERP solutions have plenty of resources available for support and implementation. By choosing a solution with many certified partners, call centres, support plans, and support teams who are familiar with related systems to choose from, you increase your likelihood of effective use. The higher the number of companies using a particular ERP solution, the more likely the software is going to stay in the market for a while. Find an ERP solution that others in your industry use comfortably and effectively.

3. Support and Stability

It is essential that the ERP software companies that you are considering come with a support guarantee, otherwise you may leave yourself vulnerable to hidden costs for necessary upgrades if the product you chose becomes obsolete. It is also important to consider how stable the software publisher is and whether they are likely to retain their position within the market, thereby continuing to provide the support you require.

4. Costs and Fees

This includes not only the initial purchasing and implementation cost, but any ongoing costs you are likely to incur through the need for maintenance, upgrades, additional users, etc. While some systems may offer discounts at the time of purchase, you may find yourself facing higher costs in the future, negatively affecting your bottom line and ROI. Also, ensure the software companies you are considering have a cap on their annual fees, including support and updates.

5. Effective Data Usage

One of the distinct advantages of ERP systems is the ability to efficiently access and use your data. While most provide adequate transaction processing, it is equally important that the data can be easily accessible by decision makers. Timely and current information access ensures critical decisions can be made based upon the most recent data.

6. Fast Adoption

The ERP system you choose should be easy adapt for end users. It is crucial that those users become both familiar and comfortable with those functions and use. For example, because many of Microsoft Dynamics' key features resemble Microsoft Office functions, users are usually able to adapt to it quickly.

7. Flexibility

Enterprise Resource Planning is a long-range investment. A flexible system will grow with the company, accommodating new specifications as they emerge.

Flexibility is also crucial in the implementation phase, to ensure that the program can align with existing business needs and achieve integration.

8. Reporting and data extraction

The ERP system should be able to provide proper reporting / data as per the requirement of an organization. The system should support adhoc report generation as this functionality is most commonly used by business and also users should be able to modify the reports or make limited required changes to report in order to extract the relevant data.

Answer 1(b)

The following ERP Solutions are offered by Microsoft:

Microsoft Dynamics GP : Microsoft Dynamics GP is a financial accounting system designed to meet the requirements of small to midsize businesses. It has applications for financial management, human resources management, manufacturing planning, supply chain management, field service, business intelligence, collaboration, compliance and IT management. There are also ala carte modules which can be purchased separately, along with other third-party applications from independent software vendors (ISVs), which can be used to fulfill additional needs.

Microsoft Dynamics NAV : Microsoft Dynamics NAV (Navision) which is now known as Dynamics 365 Business Central is a quick to implement, easy-to use Enterprise Resource Planning (ERP) software that helps more than 100,000 companies worldwide manage their accounting and finances, supply chain, and operations. It is part of a complete solution for business from Microsoft that helps you work and grow efficiently. The product is part of the Microsoft Dynamics family, and intended to assist with finance, Manufacturing, CRM, supply chains, analytics and electronic commerce for Small and Medium-sized Enterprise and local subsidiaries of large international Groups, small and medium-sized enterprises and local subsidiaries of large international Groups. The latest update Business Central is now a cloud solution built on the rich functionality within Microsoft Dynamics NAV and adaptable to extend business applications to other Microsoft Cloud Services such as Office 365, Microsoft Flow, Power BI and PowerApps.

Microsoft Dynamics AX : Microsoft Dynamics AX (Axapta), now known as Dynamics 365 for Finance and Operations, is a high-class business management software solution designed to facilitate companies, large organizations, and holding structures in their daily activities. As the most powerful Microsoft ERP it possesses an extensive functionality for managing resources and processes connected to manufacturing, planning, supply chain, sales, financials and more.

A business solution that supports both operational and administrative processes of organizations, this single solution comes with localizations in the box for 36 countries. Microsoft Dynamics AX includes capabilities such as financial management, manufacturing, retail, business intelligence and reporting, supply chain management, and human capital management.

Microsoft Dynamics SL : Microsoft Dynamics SL (Solomon) is an ERP solution specialized to help project-driven midsize organizations manage people, projects,

and profitability. With powerful solutions for professional services, operations, field services, and construction management companies, Microsoft Dynamics SL can help manage projects on time and on budget.

Answer 1(c)

The important limitations of Management Information System (MIS) are as under:

- i. The quality of the output of MIS is basically governed by the quality of inputs and processes.
- ii. MIS is not a substitute for effective management. It means that it cannot replace managerial judgement in making decisions in different functional areas.
- iii. It is merely an important tool in the hands of executives for decision-making and problem solving.
- iv. MIS may not have requisite flexibility to quickly update itself with the changing needs of time, especially in the fast changing and complex environment.
- v. MIS cannot provide tailor made information packages suitable for the purpose of every type of decisions made by executives.
- vi. MIS takes into account mainly quantitative factors; thus it ignores non-quantitative factors like morale, attitudes of members of the organization, which have an important bearing on decision-making process of executives.
- vii. MIS is less useful for making non-programmed decision-making. Such type of decisions are not of routine type and thus they require information, which may not be available from existing MIS to executives.
- viii. The effectiveness of MIS is reduced in the organization, where the culture is to hold information and not share with others.
- ix. MIS effectiveness decreases due to frequent changes in top management organizational structure and operational team.

Answer 1(d)

Some of the important strategies necessary for success of extranet are as under:

- i. **Understand the return on investment** : The business should develop its extranet with specific goals in mind, such as improving customer satisfaction, reducing operating costs, increasing sales, or any other goal. Companies must establish clear goals and work toward them because extranets are expensive.
- ii. **Select your audience and meet its needs** : Extranets are designed to cater to the external entities of a business, such as customers, suppliers, government regulators, and stockholders. The company should carefully select the entity or entities that it wants the extranet to serve. The information needs of a stockholder are quite different from the information needs of a supplier.
- iii. **Be willing to change** : Companies must continue to invest in the extranet if it is to meet the changing needs of its audience. Otherwise, the extranet will become thereby outdated, defeating its purpose.

- iv. **Keep things simple** : People want clean, crisp, easy-to-click-on applications. Because many visitors may not be proficient with the Internet, it is important to make extranets intuitive and easy to use.
- v. **24 hours a day** : Extranets should be up and running 24 hours a day, 7 days a week. Visitors should be able to access the extranet anytime from anywhere. In the case of global companies, this becomes imperative, given the time difference between different countries.
- vi. **Work with end users** : When IT staff try to build an extranet without help, the project's chances of success sharply diminish. Successful extranets are a joint venture between IT and the business end users.
- vii. **Create a partnership** : An extranet requires solid communication between human resources and the vendor supplying or managing data. Designing an easy-to-use interface is a good start, but data must flow back and forth smoothly and, for employees, transparently.
- viii. **Manage content / provide value** : The interactive capabilities of the Web are one of its greatest strengths. An extranet allows employees to view accounts real-time and model data in ways that weren't possible just a few years ago. Employees will use an extranet only if they see value in it not because it reduces costs for company. That means content must revolve around the needs of employees and not the desires of the organization.

(Attempt all parts of either Q. No. 2 or Q. No. 2A)

Question 2

- (a) *What are the provisions relating to suspension of digital signature by the certifying authority under section 37 of IT Act, 2000 ?*
- (b) *What is Data Mining ? Briefly discuss the categories of Data Mining techniques.*
- (c) *Briefly explain any four (04) characteristics of information required for Tactical planning.*
- (d) *Explain the 'clock' component of CPU. How many bytes of data can be stored in a 16 GB pen drive ?* (4 marks each)

OR (Alternate question to Q. No. 2)

Question 2A

Distinguish between the following :

- (i) *Windows and Android Operating System*
- (ii) *OCR (Optical Character Recognition) and Bar Code Reader*
- (iii) *Factual and Analytical Information*
- (iv) *Bluetooth and WiFi.* (4 marks each)

Answer 2(a)

The provisions relating to Suspension of Digital Signature Certificate are contained in Section 37 of Information Technology Act, 2000 as amended. This provides that the

Certifying Authority which has issued a Digital Signature Certificate may suspend such Digital Signature Certificate -

- (1) (a) On receipt of a request to that effect from:
 - (i) The subscriber listed in the Digital Signature Certificate; or
 - (ii) Any person duly authorized to act on behalf of that subscriber,
- (b) If it is of opinion that the Digital Signature Certificate should be suspended in public interest.
- (2) A Digital Signature Certificate shall not be suspended for a period exceeding fifteen (15) days unless the subscriber has been given an opportunity of being heard in the matter.
- (3) On suspension of a Digital Signature Certificate under this section, the Certifying Authority shall communicate the same to the subscriber.

Answer 2(b)

Data Mining : It is a process of extracting hidden information from large databases. It is a powerful new technology to help companies focus on the important information in their data warehouses. Data mining tools may predict future trends and behaviors, allowing businesses to make proactive, knowledge-driven decisions. For a commercial business, the discovery of previously unknown statistical patterns or trends can provide valuable insight into the function and environment of their organization.

Data mining techniques can generally be grouped into two categories: Predictive Method and Descriptive Method.

Predictive Method : In this method, we can use some variables to predict unknown or future values of other variable. It is used to predict whether a newly arrived customer will spend more than Rs. 1000 at a department store.

Descriptive Method : It is a method of finding human interpretable patterns that describe the data. Data mining in this case is useful to group together similar documents returned by search engine according to their context.

Answer 2(c)

Characteristics of Information required for Tactical Planning

Predictive Nature : The information from a tactical system is sometimes produced periodically. For example, a branch credit manager of an organization may receive a weekly report showing the accounts (total dollars amount) that are more than 60 days overdue, 90 days overdue, and in hands of a collection agency. Based on this information, credit manager can decide whether the overdue account totals are within the normal range for the branch or whether it warrants special managerial action or decisions. Thus, this information system provides the means by which the credit manager can quickly identify problems and bring them under control. Also tactical information systems can produce information when it is needed on adhoc basis.

Unexpected Findings : The information provided by a tactical information system

may not be the information that was expected to be produced. For example, querying an accounting system database, a manager can find the characteristics of major customer related to credit difficulty. Investigation may reveal that overdue problem is with those customers whose employer had a cut in its workforce. The unemployment of these customers is creating an overdue problem. As a credit agency, it has to analyze the purchasing of these customers afresh.

Comparative Nature : The information produced is usually comparative in nature rather than merely descriptive. They provide managers with information that alerts them to major variation from the accepted standards. These types of information systems are similar to the control process systems that monitor output of the system continuously and provide feedback when output parameters are at variance with accepted standards.

Summary Form : The information produced is not detailed but is in summary form, however, in comparison to the strategic planning systems, it may be more elaborate. In large organizations, there would be an enormous quantity of data and would not, therefore, be information to the manager. The manager needs information relating to credit performance or balances of accounts that are overdue or in collection.

Both External and Internal Sources : The data used, as input to the system may not always confine to sources internal to the organization. It may be from external sources also. For example: the credit manager may compare the information pertaining to problems to other branches, to other periods from the same organization, or to a goal set up by top management. The credit manager may sometimes like to compare it with the experience of the whole industry.

Answer 2(d)

One of the important components of a CPU is the “clock.” The clock produces a signal that acts to synchronize the logic units within the CPU as they execute the instructions given in a program.

The CPU Clock speed refers to the number of times that a CPU's clock cycles per second. A “cycle” is technically a pulse synchronized by an internal oscillator, but in common language they're a basic unit that helps understand a CPU's speed. Typical computers have a clock speed around 2.8 GHz (Gigahertz), which means that the clock cycles 2.8 billion times a second, and execute an equivalent number of instructions.

A computer memory consists of several electronic cells. Each cell is capable of storing a byte. The smallest unit of data that can be stored is a binary digit ‘bit’, 8 bits come together to create a ‘byte’.

1KB = 1024 Byte

1 MB = 1024 KB

1 GB = 1024 MB

Hence, the bytes of data that can be stored in a 16 GB pen drive is calculated as under:

16 GB = 16 x 1024 MB

- = 16 x 1024 x 1024 KB
- = 16 x 1024 x 1024 x 1024 bytes
- = 17,17,98,69,184 bytes

However practically in devices available in market the entire 16 GB storage is not entirely available, the space available is around 14.8 GB in a 16 GB pendrive.

Answer 2A(i)

Windows OS : Microsoft Windows, also called Windows and Windows OS, is a computer operating system (OS) developed by Microsoft Corporation to run personal computers (PCs). Windows is pure Graphical User Interface (GUI) based single user but multitasking operating system from Microsoft, the largest software company in the world. Windows contains built-in networking, which allows users to share files and applications with each other if their PCs are connected to a network. In large enterprises, Windows are often connected to a network of UNIX and NetWare servers. The server versions of Windows NT and 2000 are gaining market share, providing a Windows only solution for both the client and server. Some popular versions of Windows OS are Windows 95, Window 98, Windows 2000, Windows XP, Windows Vista, Windows 7 and Windows 10 etc.

Android OS : Android is a Linux-based operating system designed primarily for touch screen mobile devices such as smart phones and tablet computers. Android was unveiled in 2007 along with the founding of the Open Handset Alliance: a consortium of hardware, software, and telecommunication companies devoted to advancing open standards for mobile devices. The first Android-powered phone was sold in October 2008.

Android is open source and Google releases the code under the Apache License. This open source code and permissive licensing allows the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. Additionally, Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of the Java programming language.

Answer 2A(ii)

Optical Character Recognition (OCR) : Optical Character Recognition, usually abbreviated to OCR, is the mechanical or electronic conversion of scanned images of handwritten, typewritten or printed text into machine-encoded text. It is widely used as a form of data entry from some sort of original paper data source, whether documents, sales receipts, mail, or any number of printed records. It is crucial to the computerization of printed texts so that they can be electronically searched, stored more compactly, displayed on-line, and used in machine processes such as machine translation, text-to-speech and text mining. OCR is a field of research in pattern recognition, artificial intelligence and computer vision.

Bar Code Reader : A Bar Code reader is an input device with an optical scanner which reads the bar code printed and converts the barcode into a machine readable form. A bar code reader consists of a light source, a lens and a light sensor translating for optical impulses into electrical signals. Bar Code reader has found wide acceptance in industry and is widely used in retail trade. It is also photo electric in nature.

Answer 2A(iii)

Factual Information : Factual information is information that solely deals with facts. It is short, non-explanatory, and rarely gives in-depth background on a topic. These are just the facts. Such information is very objective and real, something that actually exists, reality, truth is a factual information. Factual information is open to interpretation, examples of factual information are like; Temperature in a city, winner of academy award etc.

Analytical Information : Interpretations, Analysis, Criticism constitute analytical information. To examine critically, so as to bring out the essential elements or give the essence of something, analysis is required. Analytical information is the interpretation of factual information. Examples include, increase of drug use in the 2013, growth in crime rate, change in temperature patterns etc. Analytical information is the interpretation of factual information, such as what a factual information means or what it implies etc.

Answer 2A(iv)

Bluetooth : Bluetooth is a short range wireless technology that allows for exchange of data over short distances between two devices. Bluetooth allows two devices to be connected to each other wirelessly. The most common use of Bluetooth technology is in hands-free devices such as headsets used with mobile phones. Bluetooth technology can also be used to transfer data between two electronics devices without using wires.

Bluetooth technology was designed primarily to support simple wireless networking of personal consumer devices and peripherals, including cell phones, PDAs, and wireless headsets. Wireless signals transmitted with Bluetooth cover short distances, typically up to 30 feet (10 meters). Bluetooth devices generally communicate at less than 1 Mbps.

Wi-Fi : Wi-Fi is the name of a popular wireless networking technology that uses radio waves to provide wireless high speed Internet and network connections. Wi-Fi allows for local area networking using radio waves to exchange information and allowing devices to access high speed internet. Wi-Fi is simply a trademarked term meaning IEEE 802.11x. Wi-Fi works with no physical wired connection between sender and receiver by using Radio Frequency (RF) technology.

(Attempt all parts of either Q. No. 3 or Q. No. 3A)

Question 3

- (a) *What are the major advantages of Agile systems ?* (4 marks)
- (b) *Discuss the various types of software required in a Database System.* (4 marks)
- (c) *What are the assets, whose safeguarding is one of the prime objectives of IT Audit ?* (4 marks)
- (d) *What do you understand by Computer Software ? Discuss Transition Characteristics of good software.* (1+3=4 marks)

OR (Alternate question to Q. No. 3)

Question 3A

- (i) *Discuss the process of the Resignation and the Removal of Chairperson or Member of Cyber Appellate Tribunal.* (2+2=4 marks)

- (ii) *Briefly describe any four (4) elements of database.* (4 marks)
- (iii) *What is a Payment Gateway ? What are the major points of Electronic Payments which contributes to its efficiency in its widespread use ?* (2+2=4 marks)
- (iv) *Briefly discuss some of the complexities in developing a good and problem free MIS software to meet the needs of the Micro Finance Institutions (MFIs).* (4 marks)

Answer 3(a)**Advantages of Agile software development system**

- (i) *Time & Money Saving* : The very first advantage that the company got to see with the Agile Methodology is the saving of time and money. There is less documentation required though documents help to a great deal in verifying and validating the requirements but considering the time frame of the project, this approach leads to focus more on the application rather than documenting the things. Since it is iterative in its form, it tends to have a regular feedback from the end user so that the same can be implemented as soon as possible.
- (ii) *Easy to incorporate changes* : Another advantage that Agile Methodology offers to other approaches available is that in case there is any change request or enhancements come in between any phase, it can be implemented without any budget constraint though there needs to be some adjustment in the already allotted time frame which will not be a difficult task for the projects following Agile tactics.
- (iii) *Fast Execution* : Daily meetings and discussions for the project following agile approach can help to determine the issues well in advance and work on it accordingly. Quick coding and Testing makes the management aware of the gaps existing in either requirements or technology used and can try to find the workaround for the same.
- (iv) *Short Project Life Cycle* : With the quicker development, testing and constant feedbacks from the user, the Agile methodology becomes the appropriate approach for the projects to be delivered in a short span of time.
- (v) *Increased Flexibility with a Fast-Failure Mindset* : Often touted as a tenet of agile principles, fast-failure makes a lot of sense and offers more flexibility for change throughout the project. With an agile fast-failure mindset, it's easy to change a design or implementation strategy mid-cycle vs. waiting until the project is fully implemented to realize a bad decision was made. There are numerous opportunities throughout the process to reprioritize or reorganize tasks providing greater flexibility for the team.
- (vi) *Improved Team Collaboration* : Agile teams have tighter collaboration and more close, consistent communication boosting productivity and efficiency. Internal teams are challenged to work seamlessly together and navigate the best ways to communicate. Collaboration success relies heavily on quality feedback, communication and motivation across the team. In addition, agile environments provide a unique opportunity for teams to collaborate more efficiently with the client as well resulting in greater levels of trust in the team's ability to deliver high quality work.

Answer 3(b)

The various types of software required in a Database System are as under:

- (a) *Operating System Software*: An operating system is the most important software that runs on a computer. It manages the computer's memory and processes, as well as all of its software and hardware. It manages all hardware components and makes it possible for other software to run on the computers. Examples of operating system software include Microsoft Windows, Linux, Mac OS and UNIX.
- (b) *DBMS Software*: A Data Base Management System (DBMS) refers to a software that is responsible for storing, maintaining and utilizing databases. A database along with a DBMS is referred to as a database system. Some examples of DBMS software include Microsoft SQL Server, Oracle, MySQL and IBM DB2.
- (c) *Application programs and utility software*: They are used to access and manipulate data in the DBMS and to manage the computer environment in which data access and manipulation take place. Application programs are most commonly used to access data found within the database to generate reports, tabulations and other information to facilitate decision making. Utilities are the software tools used to help manage the database system's computer components.

Answer 3(c)

IT Audit is the process of collecting and evaluating evidence to determine whether a computer system has been designed to maintain data integrity, safeguard assets, allows organisational goals to be achieved effectively, and uses resources efficiently. Data integrity relates to the accuracy and completeness of information as well as to its validity in accordance with the norms.

The objectives of IT audit include assessment and evaluation of processes that ensure asset safeguarding –'assets' include the following five types of assets:

- i. *Data*: Data objects in their widest sense, i.e., external and internal, structured and non structured, graphics, sound, system documentation etc.
- ii. *Application Systems*: Application system is understood to be the sum of manual and programmed procedures.
- iii. *Technology*: Technology covers hardware, operating management systems, networking, multimedia, etc.
- iv. *Facilities*: Resources to house and support information systems, supplies etc.
- v. *People*: Staff skills, awareness and productivity to plan, organize, acquire, deliver, support and monitor information systems and services.

Answer 3(d)

Computer Software: Software refers to a set of programs, instructions, or data that makes the hardware to perform a particular set of tasks in particular order. Software comprises the entire set of programs, procedures, and routines associated with the operation of a computer system. The process of writing (or coding) programs is called programming, and individuals who perform this task are called programmers.

Transition Characteristics of good software are as follows:

Interoperability : Interoperability is the ability of software to exchange information with other applications and make use of information transparently.

Reusability : If we are able to use the software code with some modifications for different purpose then we call software to be reusable.

Portability: The ability of software to perform same functions across all environments and platforms, demonstrate its portability.

Answer 3A(i)

Process of Resignation by the Presiding officer Chairperson or Member of the Cyber Appellate Tribunal

The Presiding officer Chairperson or Member of the Cyber Appellate Tribunal may, by notice in writing under his hand addressed to the Central Government, resign his office provided that the said Presiding officer Chairperson or Member shall, unless he is permitted by the Central Government to relinquish his office sooner, continue to hold office until the expiry of three months from the date of receipt of such notice or until a person duly appointed as his successor enters upon his office or until the expiry of his term of office, whichever is the earliest.

Process of Removal of the Presiding officer Chairperson or Member of the Cyber Appellate Tribunal

The Presiding officer Chairperson or Member of a Cyber Appellate Tribunal shall not be removed from his office except by an order by the Central Government on the ground of proved misbehavior or incapacity after an inquiry made by a Judge of the Supreme Court in which the Chairperson or Member concerned has been informed of the charges against him and given a reasonable opportunity of being heard in respect of these charges. The Central Government may, by rules, regulate the procedure for the investigation of misbehavior or incapacity of the aforesaid Presiding officer Chairperson or Member.

Answer 3A(ii)

Elements of database:

- i. *The database schema* – It is a structure defined by the database administrator of a Database system that refers to the organization of data. It is also called as blueprint of database system.
- ii. *Schema objects* - A schema is a collection of database objects. A schema is owned by a database user and has the same name as that user. Schema objects are logical structures created by users. Objects such as tables or indexes hold data, or can consist of a definition only, such as a view.
- iii. *Indexes* - A database index is a data structure that improves the speed of data retrieval operations on a database table at the cost of slower writes and the use of more storage space.
- iv. *Tables* - A data table is a set of data elements that is organized using a model of vertical columns and horizontal rows, the cell being the unit where a row and column intersect.

- v. *Fields and columns* - A column is a set of data values of a particular simple type, one for each row of the table. The columns provide the structure according to which the rows are composed. Columns are also called as fields.
- vi. *Records and rows* - It is a set of fields called as record or tuple or row.
- vii. *Keys* - A key part of a relational database and a vital part of the structure of a table. They ensure each record within a table can be uniquely identified by one or a combination of fields within the table. There are various type of keys we used like super key, candidate key, primary key etc.
- viii. *Relationships* - We create different types of entities or tables in the database but these entities should have a kind of relationship between them. There are various kind of relationships like one to one, one to many etc.
- ix. *Data types* – These are the characteristics assigned to a particular field that which kind of value will it contain. Like character, integer, float etc.

Answer 3A(iii)

Electronic Payment Portal or Payment gateway

Electronic Payment Portal or Payment gateway is an E-commerce application service provider service that authorizes payments for e-businesses, online retailers, bricks and clicks, or traditional brick and mortar. It is the equivalent of a physical point of sale terminal located in most retail outlets. Payment gateways protect credit card details by encrypting sensitive information, such as credit card numbers, to ensure that information is passed securely between the customer and the merchant and also between merchant and the payment processor.

The following points contribute to efficiency of Electronic Payments:

- i. Electronic payment systems leave behind an electronic documented audit trail, streamlining your auditing and accountancy processes.
- ii. Bank wires are cumbersome and expensive.
- iii. Accepting payments online stream lines the buying cycle. By making your order, stock, purchase, payment and dispatch processes electronic, from website to back office, you don't have to re-key order data.
- iv. Shopping site software can be easily integrated with popular Backoffice packages, such as Sage, to automate ordering, stock control, invoicing and accounting systems.

Answer 3A(iv)

Some of the complexities in developing a single or a small number of software to meet the needs of the Micro Finance Institutions (MFIs) are discussed below:

Many Institutional Models : The organizational forms is a function of the specific of social, political, economics, regulatory and legal environments throughout the world. There are a variety of organizational forms that are assumed by the MFIs for carrying on their work. The MFIs can be in the form of credit union, cooperatives, Non-Governmental Organizations (NGO) and even banks. All have their own varied type of requirement for MIS and its automation.

Different Lending Methodologies : MFIs have vastly different lending methodologies across the globe and even within the same country. Some MFIs follow individual lending some follow village banking methodology and yet others may be following solidarity group lending. In India for example some MFIs follow the e-Grameen Model as per the example of the Grameen Bank, Bangladesh while others follow Self Help Group Model as propagated by the institutions like National Bank for Agriculture and Rural Development (NABARD).

Methodology on Interest Payment : The practices for calculating interest and the periodicity for its payment vary according to the product and organisation. These variations can occur even within the same organisation depending on the product and the area of operation.

Other Varied Requirements : There are variations in terms of the currencies, languages and reporting requirements of the MFIs.

Question 4

- (a) *Discuss the Vision of NSDG in e-Governance in India.*
- (b) *What are the functions of Controller of Certifying Authority ?*
- (c) *Define Business Process Re-engineering (BPR). What is the reason for its Automation ?*
- (d) *Explain any four (04) attributes of data or information, which are maintained by Information System Audit. (4 marks each)*

Answer 4(a)

Vision of National e-Governance Service Delivery Gateway (NSDG)

The emergence of many e-Governance applications for different departments to provide online services to citizens, businesses and government would require increasing interactions amongst departments and with external agencies at various levels in Government. Departments would need to develop connectors / adaptors for point to point connections between departments creating a mesh and also tight coupling between applications. This would lead to applications that are difficult to maintain and upgrade in case of version change and change in government policies and business rules.

The NSDG is an attempt to reduce such point to point connections between departments and provide a standardized interfacing, messaging and routing switch through which various players such as departments, front-end service access providers and back-end service providers can make their applications and data inter-operable. The NSDG aims to achieve a high order of interoperability among autonomous and heterogeneous entities of the Government (in the Centre, States or Local bodies), based on a framework of e-Governance Standards.

Answer 4(b)

Functions of the Controller of Certifying Authority

The Controller may perform all or any of the following functions, namely:

- i. Exercising supervision over the activities of the Certifying Authorities;

- ii. Certifying public keys of the Certifying Authorities;
- iii. Laying down the standards to be maintained by the Certifying Authorities;
- iv. Specifying the qualifications and experience which employees of the Certifying Authorities should possess;
- v. Specifying the conditions subject to which the Certifying Authorities shall conduct their business;
- vi. Specifying the contents of written, printed or visual materials and Advertisements that may be distributed or used in respect of a Digital Signature Certificate and the public key;
- vii. Specifying the form and content of a Digital Signature Certificate and the Key;
- viii. Specifying the form and manner in which accounts shall be maintained by The Certifying Authorities;
- ix. Specifying the terms and conditions subject to which auditors may be Appointed and the remuneration to be paid to them;
- x. Facilitating the establishment of any electronic system by a Certifying Authority either solely or jointly with other Certifying Authorities and regulation of such systems;
- xi. Specifying the manner in which the Certifying Authorities shall conduct their dealings with the subscribers;
- xii. Resolving any conflict of interests between the Certifying Authorities and the Subscribers;
- xiii. Laying down the duties of the Certifying Authorities; and
- xiv. Maintaining a data base containing the disclosure record of every Certifying Authority containing such particulars as may be specified by regulations, which shall be accessible to public.

Answer 4(c)

Business Process Re-engineering (BPR) : The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed is called as Business Process Re-engineering (BPR). Business Process Re-engineering aims at cutting down enterprise costs and process redundancies, duplication on a very huge scale etc. It is also important to consider the resources available and staff commitment required before commencing an automation project. Financial resources are important, but people are an even more critical element in any automation process. When considering automation, the key stakeholders need to be identified.

Reasons for Automation:

Automation should be viewed as a tool to facilitate daily operations and planning in a records and archives institution. If implemented well, automation can increase staff efficiency, perform routine tasks automatically and analyse data more quickly than could

be done manually. Manual information systems may not be fast enough or sophisticated enough to meet growing user demands as well as the higher expectations and standards brought about in society by increased computerisation.

If people find that they can access information in one office or agency using computers, they will soon come to expect other offices to provide the same level of service.

Answer 4(d)

Information System Audit includes assessment and evaluation of processes that ensures that the following seven attributes of data or information are maintained:

- i. *Effectiveness* - It deals with information being relevant and pertinent to the business process as well as being delivered in a timely, correct, consistent and usable manner.
- ii. *Efficiency* - Concerns the provision of information through the optimal (most productive and economical) usage of resources. Deals with System efficiency - efficient systems use optimum resources to achieve the required objectives.
- iii. *Confidentiality* - Concerns protection of sensitive information from unauthorized disclosure.
- iv. *Integrity* - Relates to the accuracy and completeness of information as well as to its validity in accordance with the business' set of values and expectations.
- v. *Availability* - Relates to information being available when required by the business process, and hence also concerns the safeguarding of resources.
- vi. *Compliance* - Deals with complying with those laws, regulations and contractual arrangements to which the business process is subject, i.e., externally imposed business criteria. This essentially means that systems need to operate within the ambit of rules, regulations and/or conditions of the organisation.
- vii. *Reliability of information* - Relates to systems providing management with appropriate information for it to use in operating the entity, in providing financial reporting to users of the financial information, and in providing information for reporting to the regulatory bodies regarding compliance with laws and regulations.

Question 5

- (a) Explain the basic e-Governance models along with any two (02) types of services or information provided by each of these e-Governance models.
- (b) Explain in brief various limitations which are associated with an ERP system.
(8 marks each)

Answer 5(a)

E-Governance itself is governed by the needs and demands of citizens, businesses, government and employees. These four models of e-Governance are as under:

1. Government to Citizens (G2C)
2. Government to Government (G2G)
3. Government to Employees (G2E)
4. Government to Business or Business to Government (G2B or B2G)

Government to Citizen (G2C)

This model of e-Governance refers to those activities in which the government provides one- step, on-line access of information and services to citizens. G2C applications enable citizens to ask questions of government agencies and receive answers such as file income taxes (federal, state and local), pay taxes (income, real estate), renew driver licenses etc. It gives citizens the choice of when to interact with the government (e.g. 24 hours a day, 7 days a week), from where to interact with the government (e.g. service centre or from one's home / work place) and how to interact with the government (e.g. through internet, fax, telephone, e-mail etc.)

Type of services which are provided by this model include:

- i. Payment of online bills such as electricity, water, telephone bills etc.
- ii. Online registration of applications.
- iii. Copies of land-record.
- iv. Online filling of complaints.
- v. Availability of any kind of online information.

Government To Government (G2G)

This model refers to the services which are shared between the governments. There is lots of information that need to be shared between various government agencies, department and organizations. Many of these activities are aimed at improving the efficiency and effectiveness of overall government operations. These types of services or information are as under:

- i. Sharing of information between police department of various states.
- ii. Government document exchange which includes preparation, approval, distribution, and storage of all governmental documents is also done through e-governance.
- iii. Most of the finance and budget work are also done through e-governance.

Government to Employees (G2E):

This model increases the transparency between government and its employees. Here, employees can keep a check on the functioning and working of government and government can keep on its employees. Information that can be shared by this model:

- i. All kind of data submission (attendance record, employee record etc.) from various government offices is done by this model.
- ii. Employee can file all kinds of complaints and dissatisfaction by this model.
- iii. All kinds of rule- regulation and information for employees can be shared by this.
- iv. Employees can check their payment and working record.
- v. Employees can register all kinds of working forms online.

Government to Business or Business to Government (G2B OR B2G):

In G2B, the government deals with businesses such as suppliers using the internet and other ICTs. It includes two-way interactions and transactions government to business and business to government. B2G refers to the business selling products and services to government. The B2G initiatives can be transactional such as in licensing, permits, procurement and revenue collection. The objective is to cut red tape, save time, reduce operational costs and to create a more transparent business environment when dealing with the government.

They share information through this model like:

- i. Collection of taxes.
- ii. Rejection and approval of patent is also done by this model.
- iii. Payment of all kinds of bills and penalty.
- iv. Sharing of all kinds of information, rules and data.
- v. Complaints or any kind of dissatisfaction can be shown by this.

Answer 5(b)**Limitations of ERP system**

Each good system is having some limitations and for these limitations, sometimes people become reluctant to implement good system. ERP is also not different and it has also got some limitations. The limitations which are associated with an ERP system are discussed herein:

(i) Difficult to implement in running businesses

Implementing an ERP system in a new business can be very effective. Implementing the same system in an older business can be very difficult. All employees must be trained, and there will be significant down time as the business switches all applications over to the new system.

(ii) Customization is problematic

Every business has its own requirement and there is no ERP which may be suited for all business's requirement so to implement an ERP system in an organisation, first the detailed study about the different processes of a business is done and then various customizations are done to make the ERP suitable for a particular organisation requirement. The customization process involves lots of money and resources which works as a limitation to the implementation of an ERP system in an organisation.

(iii) Policy Limitations

ERP systems do not fit the business plans of every enterprise. Often, ERP systems must be customized to allow for specific tasks. Not all ERP systems allow this depending on the system or company the business uses, it may be against policy to make such drastic changes to the application.

(iv) Ongoing Support

Support for ERP systems often can be difficult to depend on. Technical response can be adept at dealing with minor problems, but major complications with the

ERP systems can be beyond the limited customer service available to businesses.

(v) Lack of user participation in ERP implementation

The participation of users is very important for successful implementation of ERP projects – So, exhaustive user training and simple user interface might be critical. Moreover involvement of key users at the pre implementation stage and implementation stage is very important and lack of their involvement acts as a limitation for ERP system.

(vi) Resistance to change

Implementing ERP system in an organisation requires lot of process changes, starting new process etc. In this process, certain people's profile gets redundant and they need to transfer to other processes. Moreover implementing ERP requires people to adapt to the new processes and technologies. All this become a reason of resistance by people which works as a big limitation for ERP implementation.

(vii) High Annual Charges

Most of the ERP vendors charge large sums of money for annual license renewal that is unrelated to the size of the company using the ERP or its profitability. This acts as a big limitation for an ERP implementation.

(viii) Cutting Expenses on Training

Success depends on the skill and experience of the workforce, including training about how to make the system work correctly. Many companies cut costs by cutting training budgets. Privately owned small enterprises are often undercapitalized, meaning their ERP system is often operated by personnel with inadequate education in ERP in general. This acts as a big limitation.

(ix) Dependency on one Vendor/High switching cost

Once an ERP system is implemented it becomes a single vendor lock-in for further upgrades, customizations etc. Moreover once a system is established, switching costs are very high for any one of the partners (reducing flexibility and strategic control at the corporate level).

(x) Time consuming

ERP deployment projects are lengthy and are time consuming, projects may take 1 to 3 years to complete and the designed processes may even require further tweaking once implementation is complete.

(xi) Cost savings / ROI may take years to realise

It may take years for the business to realise the benefit of the newly implemented ERP system. The transactional data also takes time to build up and to be accurate for reporting.

Question 6

Write short notes on the following :

(a) Digital Certificate

(b) Flow Chart

(c) *Modem*

(d) *Online Transaction Processing (OLTP).*

(4 marks each)

Answer 6(a)

Digital Certificate : A Digital signature (standard electronic signature) takes the concept of traditional paper-based signing and turns it into an "electronic fingerprint". This fingerprint or coded message, is unique to both the document and the signer and binds both of them together. The digital signature ensures the authenticity of the signer. Any changes made to the document after it is signed invalidate the signature, thereby protecting against signature forgery and information tampering. Digital signatures help organizations to sustain signer authenticity, accountability, data integrity and non-repudiation of electronic documents and forms. A digital signature is issued by a Certifying Authority (CA) and is signed with the CA's private key. A digital signature/electronic signature typically contains the: Owner's public key, the Owner's name, Expiration date of the public key, the Name of the issuer (the CA that issued the Digital ID), Serial number of the digital signature, and the digital signature of the issuer. Digital signatures deploy the Public Key Infrastructure (PKI) technology.

Answer 6(b)

Flowchart : Flowchart is a graphical representation of an algorithm and it should flow from top to bottom. Flowcharts are generally drawn in the early stages of formulating computer solutions. Flowcharts facilitate communication between programmers and business people. These flowcharts play a vital role in the programming of a problem and are quite helpful in understanding the logic of complicated and lengthy problems. Once the flowchart is drawn, it becomes easy to write the program in any high level language. Often we see how flowcharts are helpful in explaining the program to others. Hence, it is correct to say that a flowchart is a must for the better documentation of a complex program.

Answer 6(c)

Modem : Modem is the abbreviated form of Modulator Demodulator. A modem is a device or program that enables a computer to transmit data over, for example, telephone or cable lines. Computer information is stored digitally, whereas information transmitted over telephone lines is transmitted in the form of analog waves. A modem converts between these two forms. It modulates an analog carrier signal to encode digital information, and also demodulates such a carrier signal to decode the transmitted information. The goal is to produce a signal that can be transmitted easily and decoded to reproduce the original digital data. Modems can be used over any means of transmitting analog signals, from light emitting diodes to radio. The most familiar example is a voice band modem that turns the digital data of a personal computer into modulated electrical signals in the voice frequency range of a telephone channel. These signals can be transmitted over telephone lines and demodulated by another modem at the receiver side to recover the digital data.

Answer 6(d)

Operational Databases (OLTP - On Line Transaction Processing) : Operational databases (OLTP- On Line Transaction Processing), are used to manage more dynamic

bits of data. These types of databases allow you to do more than simply view archived data. Operational databases allow you to modify that data (add, change or delete data). These types of databases are usually used to track real-time information. For example, a company might have an operational database used to track warehouse/stock quantities. As customers order products from an online web store, an operational database can be used to keep track of how many items have been sold and when the company will need to reorder stock. Examples of OLTP systems are- Online Banking, Online Ticket booking, Online Order booking etc.

FINANCIAL, TREASURY AND FOREX MANAGEMENT

Time allowed : 3 hours

Maximum marks : 100

NOTE : 1. Answer ALL Questions.

2. Tables showing the present value of ₹1 and the present value of an annuity of ₹1 for 15 years are annexed.
3. Suitable assumptions, if considered necessary, may be made while answering a question. However, such assumptions must be stated clearly.
4. Working notes should form the part of answer.

Question 1

Comment on the following:

- (a) Investment, financing and dividend decisions are inter-related.
- (b) The depository system functions very much like the banking system.
- (c) A stable dividend policy is always preferable to fluctuating dividend policy.
- (d) Stock options are meant for speculators. (5 marks each)

Answer 1(a)

Financial Management is concerned with investment, financing and dividend decisions in relation to objectives of the company. Investment ordinarily means profitable utilisation of funds. Investment decisions are concerned with the question whether adding to capital assets today will increase the net worth of the firm. Financing is next step in financial management for executing the investment decision one taken. Financial decision making is concerned with the question as to how funds requirements should be met keeping in view their cost, and how far the financing policy influences cost of capital. The dividend decision is another area of financial management. The financial manager helps in deciding whether the firm should distribute all profits or retain them or distribute a portion and retain the balance.

The basic decisions of finance includes three types of decisions i.e. investing, finance and dividend decisions but they are interlinked with each other somehow. It can be evident from the following points:

- The main objective of all the above decisions is same which is profit maximization of business and wealth maximization of shareholders.
- In order to make investment decisions such as investing in some major projects, the first thing we need to consider is the finance available and required to make investment.
- Finance decision is also influenced by dividend decision. If more of the dividend is distributed, there is a need to raise more finance from external sources.
- If more of the profits are retained for long term investment, there is less need of outside financing.

Hence, there is a need to take into account the joint impact of all the three decisions and effect of each of the decision on the market value of the company and its shares to achieve the overall objective of the business.

Answer 1(b)

The depository system functions very much like the banking system. A bank holds funds in accounts whereas a Depository holds securities in account for its clients. A bank transfers fund between accounts whereas a Depository transfers securities between accounts. In both systems, the transfer of funds or securities happens without the actual handling of funds or securities. Both the Banks and the depository are accountable for the safe keeping of funds and securities respectively.

Answer 1(c)

A stable dividend policy is always preferable to fluctuating dividend policy. A dividend announcement by the company carries a lot of information about the performance of the company. Stable dividend policy conveys the idea that the operations of the company are stable and in comfortable position. A fluctuating dividend implies that the company is not able to maintain the performance. Shareholders and investors prefer a company which has a stable dividend policy so that they are sure about the quantum of their dividend income and they can plan for the reinvestment of this income.

Generally, the organisations which deal in necessities suffer less from fluctuating incomes than those organisations which deal with fancy or luxurious goods

Answer 1(d)

Stock option are looked upon as a speculative vehicle as well as a hedging mechanism. A holder of stock may buy a put option as a risk hedging action. A speculator is a person who simply transacts without having physical asset with him. He may buy or sell call option or put option depending upon his perception about the future behavior of price. There is an expectation of loss as well. Yet, the expectation of market increase might be such that it outweighs the expectation of loss and thus provides a desirable speculation acceptable to both parties.

For example, suppose a trader has \$2,000 to invest, and an XYZ stock costs \$50 and an XYZ call option (with a strike price of \$70 that expires in one months) costs \$0.20 each. The premium is thus \$2 per contract since each options contract is based on 100 shares of stock.

If the trader only buys stock, there will be simply a long position of 40 shares (\$2,000/\$50). But, if a position is taken using only options (\$2,000/\$2), they would effectively control a position of 1,000 shares. In this case, any gains and losses would be magnified by the leverage gained from using options. In this example, if the XYZ stock drops to \$49 in six months, in the all-stock scenario, the trader's position is worth \$1,960 (a loss of \$40), whereas in the all-options situation, the total value would be \$0 at expiration since the options would expire worthless because nobody would agree to buy shares at a price that is greater than the current market value.

The speculator's anticipation on the asset's future direction will determine what sort of options strategy that is taken. If the speculator believes that an asset will increase in

value, they should purchase call options that have a strike price that is lower than the anticipated or targeted price level. In the event that the speculator's belief is correct and the asset's price does indeed go up substantially, they will be able to close out of the position and realize a gain (by selling the call option for the price that will be equal to the difference between the strike price and the market value).

Attempt all parts of either Q. No. 2 or Q. No. 2A

Question 2

Distinguish between the following:

- (a) 'Factoring' and 'Bill discounting'.
- (b) 'Semi-strong form' and 'Strong form' of efficient market hypothesis.
- (c) 'Financial distress' and 'Insolvency'.
- (d) 'Commodity futures' and 'financial futures'. (4 marks each)

OR (Alternate question to Q. No. 2)

Question 2A

- (i) Describe the motives of holding cash.
- (ii) Explain Sweat Equity shares.
- (iii) Discuss Liquidity Vs Profitability in management of working capital.
- (iv) Describe Bridge Finance. (4 marks each)

Answer 2(a)

Distinguish between factoring and bill discounting

- Under a bill discounting arrangement, the drawer undertakes collecting the bills and remitting the proceeds to the financing hand, under factoring agreement, the factor collects client's bills.
- Bill discounting is always with recourse whereas factoring can be either with recourse or without recourse.
- The finance house discounting bills does not offer any non-financial services unlike a factor which finances and manages the receivable of a client.
- In case of bill discounting, the financier's income is discounting charges or interest whereas in case of factoring, the financier gets interest for financial services and commission for other allied services

Answer 2(b)

Distinguish between 'Semi-strong form' and 'Strong form' of efficient market hypothesis

The efficient-market theory is considered as having three forms, viz. Weak Form, Semi-strong Form and the Strong Form.

Semi-strong Form Theory : This form says that the current share valuation is a

reflection of historical information plus publicly available knowledge about the company. It maintains that as soon as the information becomes publicly available, it is absorbed and reflected in current prices. An analyst and an investor are similarly placed in so far as making use of the information is concerned. Thus an analyst cannot obtain better returns than an ordinary investor.

Strong Form Theory : According to this form, not only is the publicly available information useless to the analyst or the investor, but all information is useless. No information, whether public or inside information can be used to earn better returns than the market.

Answer 2(c)

Distinguish between 'Financial distress' and 'Insolvency'

Generally the affairs of a firm should be managed in such a way that the total risk (business as well as financial) borne by equity holders is minimised and is manageable. Otherwise, the firm would obviously face difficulties. If cash inflow is inadequate, the firm will face difficulties in payment of interest and repayment of principal. If the situation continues long enough a time will come when the firm would face pressure from creditors. Failure of sales can also cause difficulties in carrying out production operations. The firm would find itself in a tight spot. Investors would not invest further. Creditors would recall their loans. Capital market would heavily discount its securities. Thus, the firm would find itself in a situation called distress. It may have to sell its assets to discharge its obligations to outsiders at prices below their economic values i.e. resort to distress sale. So, when the sale proceeds are inadequate to meet outside liabilities, the firm is said to have failed or become bankrupt or (after due process of law are gone through) insolvent.

Answer 2(d)

Distinguish between 'Commodity futures' and 'financial futures'

The main difference between commodity and financial futures contracts are:

1. Nature of the underlying instrument - In a commodity Futures, the underlying asset is a commodity which may be Wheat, Cotton, Pepper, Turmeric, corn, oats, soya beans, orange juice, crude oil, natural gas, gold, silver, pork-bellies etc.

In a financial future, the underlying asset can be Bonds, Stocks, Stock-Index, Foreign Exchange, Euro-dollar deposits etc.
2. A financial Future is fairly standard and there are no quality issues while a commodity instrument, quality of the underlying matters.
3. Financial futures usually have a limited range of delivery dates based on a 3-month cycle: commodity futures often have monthly or seasonal delivery dates.
4. Most financial futures are cash settled: commodity futures contracts may specify a delivery location.

Answer 2A(i)

The motives for holding the cash balances are:

The transaction motive

The transaction motive refers to the holding of cash to meet routine cash requirements to finance the transaction which a firm carries on in the ordinary course of business. The need to hold cash is minimized, if it is possible to synchronize cash receipts and cash payment. But in the business world, it would be a miracle, if cash receipts coincided perfectly with cash disbursements. Therefore, the firms are required to maintain sufficient cash to meet its normal requirements. Normal cash requirements are those which are predictable and occur as a result of normal operations and include cash for such things as raw materials supplies, interest, wages and salaries, replacement of fixed assets which are worn out through use, dividends and taxes. Thus, the transaction motive refers to the holding of cash to meet anticipated obligations whose timing is not perfectly synchronised with cash receipts.

Precautionary Motive

Precautionary motive of holding cash implies the need to hold cash to meet unpredictable obligations. The abnormal requirements, which cannot be anticipated in the normal routine of the business process, include, cash for such things as:

- a) Fixed assets replaced for reasons other than normal depreciation;
- b) Unexpected slow-down in collection of account receivables;
- c) Presentation of bills for settlement earlier than expected;
- d) Sharp increase in cost of raw materials;
- e) Floods, strikes and failure of important customers etc.

The cash balances held in reserve for such random and unforeseen fluctuations in cash flows are called Precautionary balances. Precautionary cash balance provides a cushion to meet unforeseen contingencies.

Speculative motive

The speculative motive refers to the holding of cash for investing in profit making opportunities as and when they arise. While precautionary motive is defensive in nature, the speculative motive represents a positive and aggressive approach. The speculative motive helps to take advantage of:

- a) Making purchases of raw materials at a reduced price on payment of immediate cash;
- b) Delaying the purchase of raw materials in anticipation of decline in prices; and
- c) Speculation in the movements of prices of securities and rates of interest.

Answer 2A(ii)**Sweat Equity Shares**

Sweat equity shares can be issued by the company to employees or directors at a discount or for consideration other than cash, for providing know how or making available rights in the nature of intellectual property rights or value additions.

Sweat equity share is a instrument permitted to be issued by specified Indian companies, under section 79A of Companies Act, 1956. According to this section a public company may issue sweat equity shares of a class of shares already issued if the following conditions are fulfilled:

- The issue of sweat equity share is authorised by a special resolution passed by the company in the general meeting.

The resolution specifies the number of shares, current market price, consideration if any and the class or classes of directors or employees to whom such equity shares are to be issued.

Not less than one year has elapsed at the date of the issue, since the date on which the company was entitled to commence business.

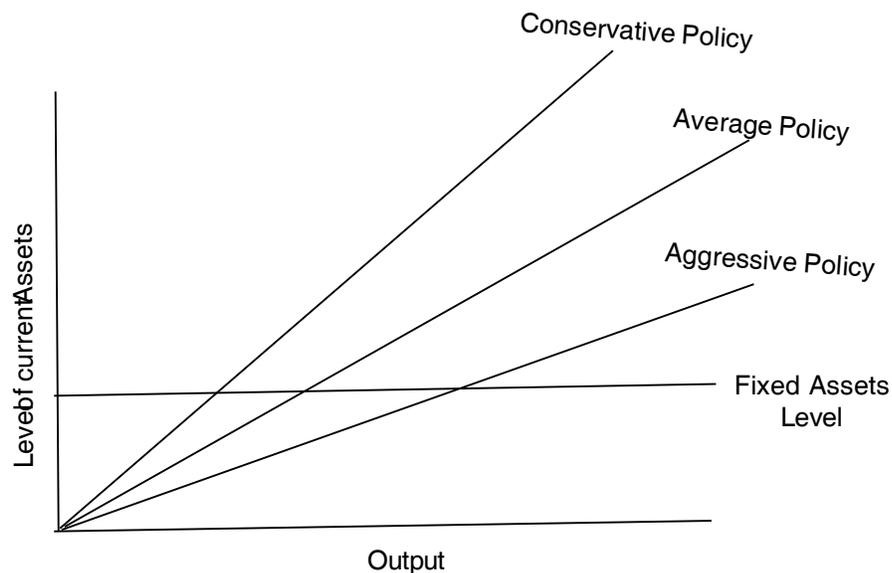
The sweat equity shares of a company whose equity shares are listed on a recognised stock exchange are issued in accordance with the regulations made by SEBI in this regard.

All the limitations, restrictions and provisions relating to equity shares are also applicable to such sweat equity shares issued under the section 79A.

Answer 2A(iii)

Liquidity vs. Profitability issue in management of working capital

Working capital management entails the control and monitoring of all components of working capital i.e. cash, marketable securities, debtors, creditors etc. Finance manager has to pay particular attention to the levels of current assets and their financing. To decide the level of financing of current assets, the risk return trade off must be taken into account. The level of current assets can be measured by creating a relationship between current assets and fixed assets. A firm may follow a conservative, aggressive or moderate policy.



A conservative policy means lower return and risk. While an aggressive policy produces higher return and risk. The two important aims of the working capital management are profitability and solvency. A liquid firm has less risk of insolvency that is, it will hardly experience a cash shortage or a stock out situation. However, there is a cost associated with maintaining a sound liquidity position. However, to have higher profitability the firm may have to sacrifice and solvency maintain a relatively low level of current assets.

Answer 2A(iv)

Bridge Finance

It refers to making funds available by commercial banks for meeting immediate requirements of the business pending release of loans sanctioned by the financial institutions or proceeds of fresh issue of capital. As the nature of bridge finance is to fill in the gap to make immediately the funds available for business, commercial banks provide this type of finance for short term. The bridge finance assumes demand character and is guaranteed by the third person. The term is also used by the financial institutions while making funds available to the borrower company out of the sanctioned amount pending completion of various formalities viz., signing loan agreement, and other security documents. The financial institutions provide this facility only to those companies who have been sanctioned the loan for project financing. The basic idea in bridge finance is to provide funds to the company to meet its pressing requirements immediately.

Attempt all parts of either Q. No. 3 or Q. No. 3A

Question 3

- (a) The MNO company is considering an investment in one of the two mutually exclusive proposals. Project A which involves an initial outlay of ₹1,50,000 and project B which has an outlay of ₹1,30,000. The certainty equivalent approach is employed in evaluating risky investments. The current yield on treasury bills is 5% p.a. and the company uses this as riskless rate. The expected values of net cash flows with their respective certainty equivalents are:

Year	Project A		Project B	
	Net Cash flow (₹ thousand)	Certainty equivalent	Net Cash flow (₹ thousand)	Certainty equivalent
1	90	0.8	90	0.9
2	100	0.7	90	0.8
3	110	0.5	100	0.6

Which project should be acceptable to the company ?

(4 marks)

- (b) A forex trader wants to earn arbitrage gain. He receives following data and quotes from the forex. and money market:

Spot rate of US \$	₹ 43.30/\$
6 Month forward rate of US. \$	₹ 43.70/\$

Annualised interest rate for 6 months (US \$)	4% p.a.
Annualised interest rate for 6 months (?)	8% p.a.

You are required to show the transactions the trader will execute to receive the arbitrage gain, if he is willing to borrow ₹43.30 million or US \$ 1 million, assuming that no transaction cost or taxes exist. (4 marks)

(c) The following information is available for a component in use at TQR Ltd. :

Normal usage	150 units per month
Maximum usage	250 units per month
Minimum usage	50 units per month
Economic Order Quantity (EOQ)	1000 units
Lead Time for Orders	1 to 2 months

Calculate following parameters for the component:

- (i) Reorder level
- (ii) Maximum level
- (iii) Minimum level
- (iv) Average level.

(d) Following are the details regarding operations of XYZ Company Ltd. during a period of last 12 months :

Sales	₹12,00,000
Selling Price per unit	₹10
Variable cost per unit	₹7
Total cost per unit	₹9
Credit period allowed to customers	one month

The company is considering proposal for a more liberal credit policy by increasing the average collection period from one month to two months. This relaxation is expected to increase sales by 25%.

You are asked to advise the company whether to proceed on adoption of new credit policy assuming that the company's required rate of return on investment is 30% p.a. (4 marks)

OR (Alternate question to Q. No. 3)

Question 3A

- (i) During a year, the price of a British Bond (face value £100) rose from £103 to £105 while paying a coupon of £8. At the same time, the exchange rate moved from \$/£ 1.70 to \$/£ 1.58. What is the total annual return in % for an investor in US who invested in the above Bond ? (4 marks)

- (ii) Calculate (a) the Operating Leverage, (b) Financial Leverage and (c) Combined Leverage from the following data under situations I and II and financial plans, A and B :

Installed capacity	4,000 units per annum
Actual production and sale	75% of the installed capacity
Selling price	₹30 per unit
Variable cost	₹15 per unit
Fixed cost	Under situation I, ₹15,000 Under situation II, ₹20,000

Capital Structure:

	Financial Plan	
	A	B
Equity	₹ 10,000	₹15,000
Debt @ 20% p.a. interest	10,000	5,000
	20,000	20,000

(4 marks)

- (iii) From the following information, calculate the expected rate of return of a portfolio:

Risk-free rate of return	12% p.a.
Expected return on market portfolio	20% p.a.
Standard deviation of an asset	3%
Market standard deviation	2.5%
Correlation coefficient of portfolio with market	0.80

(4 marks)

- (iv) Raj Limited had 50,000 equity shares of ₹10 each outstanding on January 1st. The shares are currently being quoted at par in the market. The company now intends to pay a dividend of ₹2 per share for the current calendar year. It belongs to a risk class whose appropriate capitalisation rate is 15 per cent. Using ModiglianiMiller model and assuming no taxes, ascertain the price of the company's share as it is likely to prevail at the end of the year under following conditions :

- When dividend is declared
- When no dividend is declared
- Also, find out the number of new equity shares that the company must issue to meet its investment needs of ₹2 lakh, assuming a net income of ₹1.1 lakh and dividend is paid. (4 marks)

Answer 3(a)**Determination of NPV of project A**

<i>Year</i>	<i>CFAT (Thousand)</i>	<i>CE</i>	<i>CFAT x CE (Thousand)</i>	<i>PV Factor @ 0.05</i>	<i>Total PV</i>
1	90	0.8	72	0.952	68,544
2	100	0.7	70	0.907	63,490
3	110	0.5	55	0.864	47,520
Total present vale					1,79,554
Initial outlay					1,50,000
NPV					29,554

Determination of NPV of project B

<i>Year</i>	<i>CFAT (Thousand)</i>	<i>CE</i>	<i>CFAT x CE (Thousand)</i>	<i>PV Factor @ 0.05</i>	<i>Total PV</i>
1	90	0.9	81	0.952	77,112
2	90	0.8	72	0.907	65,304
3	100	0.6	60	0.864	51,840
Total present vale					1,94,256
Initial outlay					1,30,000
NPV					-64,256

The NPV is greater; Project B should be acceptable to the company.

Answer 3(b)

Spot rate = Rs. 43.30/\$

$$\text{Forward Premium} = \frac{43.70 - 43.30}{43.30} \times \frac{12}{6} \times 100 = 1.85\%$$

Annualised interest rate for 6 months (Rs) = 8%

Annualised interest rate for 6 months (US\$) = 4%

Interest rate differential = 8% -4%

Since the interest rate differential is negative in the US and is greater than forward premium, there is a possibility of arbitrage inflow into India.

The advantage by using Money Market arbitrage possibility can be analysed as follows:

Step I:

Borrow US \$ 1 Million for 6 months @4%

Amount repayable after 6 months along with interest

$$= \$ 1 \text{ million} + (\$ 1 \text{ million} \times 4 / 100 \times 6 / 12) = \mathbf{\$ 1.02 \text{ million}}$$

Step II :

Convert US \$ 1 Million into rupees and get the principal amount of Rs.43.30 million deposited @ 8% for 6 months

Total amount at the end of 6 months

$$= \text{Rs.43.30 million} + (\text{Rs.43.30 million} \times 8 / 100 \times 6 / 12) = \mathbf{\text{Rs.45.032 million}}$$

Step III :

Converting the total amount at forward rate and repay the \$ borrowed

$$= 45.032 \text{ million} / 43.70 = \$ 1.030481 \text{ million}$$

$$\therefore \text{Net gain} = (\$ 1.030481 \text{ million} - \$ 1.020 \text{ million}) = \$ 0.010481 \text{ million}$$

$$= \mathbf{\text{US \$ 10481 or Rs,4,58,020}}$$

Answer 3(c)

(i) Reorder level = Max consumption x Max Reorder period

$$= 250 \times 2 = 500 \text{ units}$$

(ii) Maximum level = Reorder level + Reorder Quantity – (Min consumption x Minimum delivery period)

$$= 500 + 1000 - (50 \times 1)$$

$$= 500 + 1000 - 50 = 1450 \text{ units}$$

$$\text{Normal consumption} = (250+50)/2 = 150 \text{ units}$$

(iii) Minimum Level = Reorder level - (Normal consumption x Normal Delivery Period)

$$= 500 - (150 \times 1.5)$$

$$500 - 225 = 275 \text{ units}$$

(iv) Average level = (1450+275)/2 = 862.5 units

Note: If ROQ is not given, we consider EOQ as ROQ

Answer 3(d)

Present cost of Sales (Rs 12,00,000 / Rs 10) = (1,20,000 units x 9) = Rs 10,80,000

Cost of additional Sales (30,000 units x Rs 7 (Variable Cost only)) = Rs 2,10,000

Total Cost of Sales = Rs12,90,000

New Average cost per unit = Rs 12,90,000 / 1,50,000 units = Rs 8.60

New Average collection period = 2 months

Amount invested in receivables = Rs 12,90,000 / 12 x 2 = Rs 2,15,000

Amount invested in number of units in receivables under existing policy
= 1,20,000 / 12 x 1 month = 10,000 units

Investment in receivables = 10,000 units x Rs 9 = Rs 90,000

Additional investment in receivables = New Investment – Old Investment
= Rs 2,15,000 - Rs 90,000 = Rs 1,25,000

Profitability of additional sales = Additional units sold x Contribution per unit
= 30,000 x 3 = Rs.90,000

Return on additional Investment in receivables = Rs.90,000 / Rs.1,25,000 x 100 = 72%

The required rate of return of the firm is only 30% while the actual return on additional investment in receivables comes to 72% on adoption of new policy. Therefore, the firm should adopt the new credit policy.

Answer 3A(i)

Assume the investor had \$1,000

He gets \$1,000/1.70 = £ 588.235

He can invest in 588.235 / 103 = 5.711 securities

Coupon Income = 5.711 x £ 8 = £ 45.688

Capital gains = 5.711 (105 - 103) = £ 11.422

Total inflow of liquidation = £ 588.235 + £ 45.688 + £ 11.422 = £ 645.345

Inflow in \$ = £ 645.345 x 1.58 = \$ 1019.645

Return = $\{(1019.645-1000)/1000\} \times 100 = 19.645/10 = 1.9645$

Answer 3A(ii)

(a) Determination of operating leverage

	<i>Situations</i>	
	<i>I</i>	<i>II</i>
Sales	Rs. 90,000	Rs. - 90,000
Less variable costs	45,000	45,000
Contribution	45,000	45,000
Less fixed costs	15,000	20,000
EBIT	30,000	25,000
Operating leverage = $\frac{\text{Contribution}}{\text{EBIT}}$	1.5	1.8

(b) Determination of financial leverage

	<i>Situations Financial</i>		<i>Situations Financial</i>	
	<i>A</i>	<i>B</i>	<i>A</i>	<i>B</i>
EBIT	Rs 30,000	Rs 30,000	Rs 25,000	Rs 25,000
Less interest on debt	2000	1,000	2,000	1,000
EBT	28,000	29,000	23,000	24,000
Financial leverage (EBIT/EBT)	1.07	1.03	1.09	1.04

(c) Determination of combined leverage

	<i>Financial Plans</i>	
	<i>A</i>	<i>B</i>
Situations I	1.5 x 1.07 = 1.61	1.5 x 1.03 = 1.55
Situation II	1.8 x 1.09 = 1.96	1.8 x 1.04 = 1.87

Answer 3A(iii)**Calculation of Expected Rate of Return of a Portfolio**

Expected rate of return of a portfolio can be worked by using following formula :

$$R_e = R_f + B_j (R_m - R_f)$$

Where R_e stands for expected rate of return of a portfolio

R_f stands for Risk free rate of interest or return

R_m stands for expected return of a portfolio

B_j stands for Beta Co-efficient of Security j

Where r_{sm} stands for correlation co-efficient of portfolio with market

s stands for Standard Deviation of an asset

m stands for Market Standard Deviation

$$= (0.80 \times 0.03) \div 0.025 = 0.96$$

Now we may get expected rate of return by substituting

$$R_e = 12 + 0.96 (20 - 12) = 19.68\%$$

Answer 3A(iv)

(i) Price of the share, when dividends are paid: $P_0 = D_1 + P_1 / (1 + k_e)$

$$10 = (\text{Rs. } 2 + P_1) / 1.15$$

$$P_1 = \text{Rs. } 9.5$$

(ii) Price of the share, when dividends are not paid : Rs.10 = P1/1.15 = Rs.11.5

(iii) Number of new equity share to be issued: $n = \frac{E - nD_1}{P_1}$
 $200000 - (110000 - 100000) / 9.5 = 20,000$ shares

Question 4

Answer the following :

(a) A share is currently trading at ₹125. It is expected to give a dividend of ₹10 per share after 4 months. Assume that the risk-free rate of return is 10% per annum. What would be approximate value of the forward contract (assuming annual compounding) on the share for delivery after 3 months ?

(b) ABC Ltd. has furnished the following information :

Earning per share	₹4
Dividend payout ratio	25%
Market price per share	₹50
Rate of tax	40%
Growth rate of dividend	10% p.a.

The company wants to raise additional capital of ₹10 lakh including debt of ₹4 lakh. The cost of debt (before tax) is 10% p.a. up to ₹2 lakh and 15% p.a. beyond that. Compute the Weighted Average Cost of Capital of the company.

(c) Explain use of yield curve in Treasury Management.

(d) Explain how the Sharpe Index Model is different from Multi Index Models.
(4 marks each)

Answer 4(a)

As the dividend of Rs. 10 is expected after the end of forward period, it is not relevant for valuation of forward.

Value of Forward contract on the share for delivery after 3 months would be:

$$F = 125 \times (1 + 0.10)^{0.25} = \text{Rs. } 128.01$$

Answer 4(b)

(i) Cost of Equity Share Capital (Ke)

$$= \frac{D_0 (1+g)}{P_0} + g = \frac{25\% \text{ of Rs. } 4 (1+0.10)}{\text{Rs. } 50} + 0.10$$

$$= \frac{\text{Rs. } 1.10}{\text{Rs. } 50} + 0.10 = 0.122 \text{ or } 12.2\%$$

(ii) Cost of Debt (K_d)

$$K_d = \frac{\text{Interest}}{\text{Net Proceeds}} \times 100 \times (1 - t)$$

Interest on first Debt Rs. Rs.2,00,000 @ 10% = Rs.20,000

Interest on next Rs.2,00,000 @ 15% = Rs. 30,000

$$K_d = \{50000 (1-0.4)\} / 4,00,000 * 100 = 7.5\%$$

(iii) Composite Cost of Capital (WACC)

Source of capital	Amount (₹)	Weights	Cost of Capital (%)	WACC (%)
Equity shares	6,00,000	0.60	12.2	7.32
Debt	4,00,000	0.40	7.5	3.0
Total	10,00,000	1.00		10.32

Alternatively Cost of Equity Share Capital (K_e) can be calculated as

According the Weighted Average Cost of Capital (WACC) will be:

Source of capital	Amount (₹)	Weights	Cost of Capital (%)	WACC (%)
Equity shares	6,00,000	0.60	12.2	7.20
Debt	4,00,000	0.40	7.5	3.0
Total	10,00,000	1.00		10.20

Answer 4(c)**Yield curve in treasury management**

Graphical presentation of the term structure of interest ratio is known as Yield Curve. The term structure of interest rates is the relationship between the maturity and interest rates. So, the yield curve shows the relationship between time to maturity and yields for a particular category of bonds at a particular point of time. The horizontal axis represents the maturity and the vertical axis represents the yield.

The treasury manager can use the yield curve to understand the expectation of interest rates. Yield curve can be used by him to take investment decisions. Shape of the yield curve shows the expected short-term and long-term interest rates.

Answer 4(d)

The Sharpe single index model imposes restrictions on how security returns can covary. In particular, it is assumed that all covariance arises through an index. This leads to a dramatic reduction in complexity.

The multi index model assumes a return generating process that is a linear function of many factors. In this approach each factor is a source of systematic risk. Since investors cannot diversify systematic risk, they are assumed to be compensated for bearing this risk.

As a result a security's sensitivity to each factor affects the assumed return generating process for the security. This sensitivity is captured by a beta factor.

The last term is the source of idiosyncratic or diversifiable risk. Except for the factor that multiple factors make this a richer model than the single index model, the use of a multi factor model is similar to the single index model.

Question 5

(a) The following particulars about four corporate securities (shares) are available :

Security	Today's Price (₹)	Predicted Price after one year (₹)	Expected Dividend during coming year (₹)	Beta estimates β
A	490	580	7.0	1.4
B	180	200	7.0	1.2
C	570	640	5.0	1.0
D	220	245	6.0	0.5

Expected rate of return in the market is 14% and the risk-free rate of return is 8%. You are required to calculate for each security :

(i) The estimated return based on the Capital Asset Pricing Model (CAPM), and

(ii) Predicted Return.

Also state, whether the securities are undervalued or overvalued.

(b) PQ established the following spread on the AB Corporation's stock :

- Purchased one 3-month call option with a premium of ₹30 and an exercise price of ₹550.
- Purchased one 3-month put option with a premium of ₹5 and an exercise price of ₹450.

AB Corporation's stock is currently selling at ₹500 with option size of 100 shares. Determine profit or loss, if the price of AB Corporation's stock :

(i) Remains at ₹500 after 3 months

(ii) Becomes ₹350 after 3 months

(iii) Becomes ₹600 after 3 months.

(8 marks each)

Answer 5(a)**(i) Estimation of Return based on CAPM**

$$\text{CAPM Equation : } R_s = R_f + \beta (R_m - R_f)$$

Where R_s stands for estimated return on the security

R_f stands for Risk free return

R_m stands for return from the market

β stands for Beta

The estimated returns are:

Security A	R_A	$8 + 1.4(14 - 8)$	$= 16.4\%$
Security B	R_B	$8 + 1.2(14 - 8)$	$= 15.2\%$
Security C	R_C	$8 + 1.0(14 - 8)$	$= 14\%$
Security D	R_D	$8 + 0.5(14 - 8)$	$= 11\%$

(ii) Calculation of Predicted Return :

$$p_{ri} = \frac{(\text{Predicted Price} - \text{Current Price}) + \text{Expected Dividend}}{\text{Current Price}} \times 100$$

Security A	P_{rA}	$\frac{(580 - 490) + 7}{490} \times 100$	$= 19.8\%$
Security B	P_{rB}	$\frac{(200 - 180) + 7}{180} \times 100$	$= 15\%$
Security C	P_{rC}	$\frac{(640 - 570) + 5}{570} \times 100$	$= 13.16\%$
Security D	P_{rD}	$\frac{(245 - 220) + 6}{220} \times 100$	$= 14.09\%$

Securities whether under-valued or over-valued

Security	Predicted Return	CAPM Return	Under valued /over valued
A	19.8%	16.4%	Under valued
B	15%	15.2%	over valued
C	13.16%	14%	over valued
D	14.09%	11%	Under valued

Answer 5(b)

- (i) Stock Remains at Rs.500 after 3 months

$$\begin{aligned} &\text{Total premium paid on purchasing a call and put option} \\ &= (\text{Rs.30 per share} \times 100) + (\text{Rs.5 per share} \times 100) \\ &= \text{Rs.3000} + \text{Rs.500} = \text{Rs.3,500} \end{aligned}$$

In this case, PQ exercises neither the call option nor the put option as both will result in a loss.

$$\text{Ending Value} = (\text{Rs. 3,500}) + \text{zero gains} = \text{Rs.3,500}$$

Therefore, net loss =Rs. 3,500

- (ii) Stock falls at Rs. 350 after 3 months

Since the price of the stock is below the exercise price of the call, the call will not be exercised. Only put option is valuable and is exercised.

$$\begin{aligned} &\text{Total premium paid} = \text{Rs.3,500} \\ &\text{Ending Value} = (\text{Rs.3,500}) + [(\text{Rs.450} - \text{Rs.350}) \times 100] \\ &= (\text{Rs.3,500}) + \text{Rs.10,000} = \text{Rs.6,500} \end{aligned}$$

Therefore net gain = Rs.6,500

- (iii) Stock raises to Rs.600 after 3 months

In this case, the put option is worthless since the price of the stock exceeds the put option's exercise price. Only call option is valuable and is exercised.

$$\begin{aligned} &\text{Total premium paid} = \text{Rs.3,500} \\ &\text{Ending Value} = (\text{Rs.3,500}) + [(\text{Rs.600} - \text{Rs.550}) \times 100] \\ &= (\text{Rs.3,500}) + \text{Rs.5,000} = \text{Rs.1,500} \end{aligned}$$

Therefore net gain = Rs.1,500

Question 6

The following annual figures relate to M Ltd.

	₹
<i>Sales (with two months' credit)</i>	<i>36,00,000</i>
<i>Materials consumed (suppliers extend two months credit)</i>	<i>9,00,000</i>
<i>Wages paid (monthly, in arrear)</i>	<i>7,20,000</i>
<i>Manufacturing expenses (monthly, in arrear)</i>	<i>9,60,000</i>
<i>Total administrative expenses (monthly, in arrear)</i>	<i>2,40,000</i>
<i>Sales promotion expenses (quarterly, in advance)</i>	<i>1,20,000</i>

The company sells its products on gross profit of 25% with depreciation as part of the cost of production. It maintains one month's inventory for each of raw materials and finished goods and a cash balance of ₹1,00,000.

Assuming a 20% safety margin, work out the working capital requirements of the company on cash cost basis, ignoring work-in-process. (16 marks)

Answer 6**Calculation of Current Assets**

<i>Item</i>	<i>Calculation</i>	<i>Amount (Rs.)</i>
Debtors	Total cash cost x 2/12 = 29,40,000 x 2/12	4,90,000
Raw materials stock	Material cost x 1/12 = 9,00,000/12	75,000
Finished goods stock	Cash manufacturing cost x 1/12 = 25,80,000/12	2,15,000
Pre-paid sales promotional expenses	1,20,000 x 3/12	30,000
Cash balance		1,00,000
A. Total Current Assets		9,10,000

Calculation of Current Liabilities

<i>Item</i>	<i>Calculation</i>	<i>Amount (Rs.)</i>
Sundry creditors	Material cost x 2/12 = 9,00,000 x 2/12	1,50,000
Manufacturing expenses	One month's cash manufacturing expenses	80,000
Wages outstanding	One month's wages	60,000
Total administrative expenses outstanding	One month's total administrative expenses	20,000
B. Total Current Liabilities		3,10,000
Net working capital (A-B)		6,00,000
Add 20% safety margin		1,20,000
Working capital required		7,20,000

Working Notes:

1. Manufacturing expenses		
Sales		36,00,000
Less : Gross profit (25%)		9,00,000
Total manufacturing cost		27,00,000
Less : Materials	9,00,000	
Wages	7,20,000	16,20,000
Total Manufacturing expenses		<u>10,80,000</u>
2. Cash manufacturing expenses		9,60,000
Depreciation :(1)-(2)		1,20,000
<i>Total cash cost :</i>		
Total manufacturing cost		27,00,000
Less : Depreciation		1,20,000
Cash manufacturing cost		25,80,000
Add : Total administrative expenses		2,40,000
Sales promotion expenses		1,20,000
Total cash cost		<u>29,40,000</u>

TABLE - 1 : PRESENT VALUE OF RUPEE ONE

RATE	YEAR	YEAR	YEAR														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	15	15
5%	0.9524	0.9070	0.8638	0.8227	0.7835	0.7462	0.7107	0.6768	0.6446	0.6139	0.5847	0.5568	0.5303	0.5051	0.4810		
6%	0.9434	0.8900	0.8396	0.7921	0.7473	0.7050	0.6651	0.6274	0.5919	0.5584	0.5268	0.4970	0.4688	0.4423	0.4173		
7%	0.9346	0.8734	0.8163	0.7629	0.7130	0.6663	0.6227	0.5820	0.5439	0.5083	0.4751	0.4440	0.4150	0.3878	0.3624		
8%	0.9259	0.8573	0.7938	0.7350	0.6806	0.6302	0.5835	0.5403	0.5002	0.4632	0.4289	0.3971	0.3677	0.3405	0.3152		
9%	0.9174	0.8417	0.7722	0.7084	0.6499	0.5963	0.5470	0.5019	0.4604	0.4224	0.3875	0.3555	0.3262	0.2992	0.2745		
10%	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855	0.3505	0.3186	0.2897	0.2633	0.2394		
11%	0.9009	0.8116	0.7312	0.6587	0.5935	0.5346	0.4817	0.4339	0.3909	0.3522	0.3173	0.2858	0.2575	0.2320	0.2090		
12%	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523	0.4039	0.3606	0.3220	0.2875	0.2567	0.2292	0.2046	0.1827		
13%	0.8850	0.7831	0.6931	0.6133	0.5428	0.4803	0.4251	0.3762	0.3329	0.2946	0.2607	0.2307	0.2042	0.1807	0.1599		
14%	0.8772	0.7695	0.6750	0.5921	0.5194	0.4556	0.3996	0.3506	0.3075	0.2697	0.2366	0.2076	0.1821	0.1597	0.1401		
15%	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759	0.3269	0.2843	0.2472	0.2149	0.1869	0.1625	0.1413	0.1229		
16%	0.8621	0.7432	0.6407	0.5523	0.4761	0.4104	0.3538	0.3050	0.2630	0.2267	0.1954	0.1685	0.1452	0.1252	0.1079		
17%	0.8547	0.7305	0.6244	0.5337	0.4561	0.3898	0.3332	0.2848	0.2434	0.2080	0.1778	0.1520	0.1299	0.1110	0.0949		
18%	0.8475	0.7182	0.6086	0.5158	0.4371	0.3704	0.3139	0.2660	0.2255	0.1911	0.1619	0.1372	0.1163	0.0985	0.0835		
19%	0.8403	0.7062	0.5934	0.4987	0.4180	0.3521	0.2959	0.2487	0.2080	0.1756	0.1476	0.1240	0.1042	0.0876	0.0736		
20%	0.8333	0.6944	0.5787	0.4823	0.4019	0.3349	0.2791	0.2326	0.1938	0.1615	0.1346	0.1122	0.0935	0.0779	0.0649		
21%	0.8264	0.6830	0.5645	0.4665	0.3855	0.3186	0.2633	0.2176	0.1799	0.1486	0.1228	0.1015	0.0839	0.0693	0.0573		
22%	0.8197	0.6719	0.5507	0.4514	0.3700	0.3033	0.2486	0.2038	0.1670	0.1369	0.1122	0.0920	0.0754	0.0618	0.0507		
23%	0.8130	0.6610	0.5374	0.4369	0.3552	0.2888	0.2348	0.1909	0.1552	0.1262	0.1026	0.0834	0.0678	0.0551	0.0448		
24%	0.8065	0.6504	0.5245	0.4230	0.3411	0.2751	0.2218	0.1789	0.1443	0.1164	0.0938	0.0757	0.0610	0.0492	0.0397		
25%	0.8000	0.6400	0.5120	0.4096	0.3277	0.2621	0.2097	0.1678	0.1342	0.1074	0.0859	0.0687	0.0550	0.0440	0.0352		

TABLE - 2 : PRESENT VALUE OF AN ANNUITY OF RUPEE ONE

RATE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
5%	0.9524	1.8594	2.7232	3.5460	4.3295	5.0757	5.7864	6.4632	7.1078	7.7217	8.3064	8.8633	9.3936	9.8986	10.3797
6%	0.9434	1.8334	2.6730	3.4651	4.2124	4.9173	5.5824	6.2098	6.8017	7.3601	7.8869	8.3838	8.8527	9.2950	9.7122
7%	0.9346	1.8080	2.6243	3.3872	4.1002	4.7665	5.3893	5.9713	6.5152	7.0236	7.4987	7.9427	8.3577	8.7455	9.1079
8%	0.9259	1.7833	2.5771	3.3121	3.9927	4.6229	5.2064	5.7466	6.2469	6.7101	7.1390	7.5361	7.9038	8.2442	8.5595
9%	0.9174	1.7591	2.5313	3.2397	3.8897	4.4859	5.0330	5.5348	5.9952	6.4177	6.8052	7.1607	7.4869	7.7862	8.0607
10%	0.9091	1.7355	2.4869	3.1699	3.7908	4.3553	4.8684	5.3349	5.7590	6.1446	6.4951	6.8137	7.1034	7.3667	7.6061
11%	0.9009	1.7125	2.4437	3.1024	3.6959	4.2305	4.7122	5.1461	5.5370	5.8892	6.2065	6.4924	6.7499	6.9819	7.1909
12%	0.8929	1.6901	2.4019	3.0374	3.6048	4.1114	4.5638	4.9676	5.3282	5.6502	5.9377	6.1944	6.4235	6.6282	6.8109
13%	0.8850	1.6681	2.3612	2.9745	3.5172	3.9975	4.4226	4.7988	5.1317	5.4262	5.6869	5.9176	6.1218	6.3025	6.4624
14%	0.8772	1.6467	2.3216	2.9137	3.4331	3.8887	4.2683	4.6389	4.9464	5.2161	5.4527	5.6603	5.8424	6.0021	6.1422
15%	0.8696	1.6257	2.2832	2.8550	3.3522	3.7845	4.1604	4.4873	4.7716	5.0188	5.2337	5.4206	5.5931	5.7245	5.8474
16%	0.8621	1.6052	2.2459	2.7982	3.2743	3.6947	4.0386	4.3436	4.6065	4.8332	5.0286	5.1971	5.3423	5.4675	5.5755
17%	0.8547	1.5852	2.2096	2.7432	3.1993	3.5892	3.9224	4.2072	4.4506	4.6586	4.8364	4.9884	5.1183	5.2293	5.3242
18%	0.8475	1.5656	2.1743	2.6901	3.1272	3.4976	3.8115	4.0776	4.3030	4.4941	4.6560	4.7932	4.9095	5.0081	5.0916
19%	0.8403	1.5465	2.1399	2.6386	3.0576	3.4098	3.7057	3.9544	4.1633	4.3389	4.4865	4.6105	4.7147	4.8023	4.8759
20%	0.8333	1.5278	2.1065	2.5887	2.9806	3.3255	3.6046	3.8372	4.0310	4.1925	4.3271	4.4392	4.5327	4.6106	4.6755
21%	0.8264	1.5095	2.0739	2.5404	2.9260	3.2446	3.5079	3.7256	3.9054	4.0541	4.1769	4.2784	4.3624	4.4317	4.4890
22%	0.8197	1.4915	2.0422	2.4936	2.8636	3.1669	3.4155	3.6193	3.7863	3.9232	4.0354	4.1274	4.2028	4.2646	4.3152
23%	0.8130	1.4740	2.0114	2.4483	2.8035	3.0923	3.3270	3.5179	3.6731	3.7993	3.9018	3.9852	4.0530	4.1082	4.1530
24%	0.8065	1.4568	1.9813	2.4043	2.7454	3.0205	3.2423	3.4212	3.5655	3.6819	3.7757	3.8514	3.9124	3.9616	4.0013
25%	0.8000	1.4400	1.9520	2.3616	2.6893	2.9514	3.1611	3.3289	3.4631	3.5705	3.6564	3.7251	3.7801	3.8241	3.8593

ETHICS, GOVERNANCE AND SUSTAINABILITY

Time allowed : 3 hours

Maximum marks : 100

NOTE: Answer **ALL** Questions.

PART A

Question 1

- (a) On June 13, 1999, Coca-Cola (Coke) recalled over 15 million cans and bottles after the Belgian Health Ministry announced a ban on Coke's drinks, which were suspected of making more than 100 school children ill in the preceding six days. This recall was in addition to the 2.5 million bottles that had already been recalled in the previous week.

The company's products namely Coke, Diet Coke and Fanta had been bottled in Antwerp, Ghent, Belgium while some batches of Coke, Diet Coke, Fanta and Sprite were also produced in Dunkirk, France.

Children at six schools in Belgium had complained of headache, nausea, vomiting and shivering which ultimately led to hospitalization after drinking Coke's beverages. Most of them reported an 'unusual odor' and an 'off-taste' in the drink. In a statement to Reuters, Marc Pattin, a spokesman for the Belgian Health Ministry explained the seriousness of the issue: "Another 44 children had become ill with stomach pains, 42 of them at a school in Lochristi, near Ghent, northwest Belgium

We have had five or six cases of poisoning of youngsters who had stomach pain after drinking (the suspect beverages). In the same week, the governments of France, Spain and Belgium also banned Coke's products while Coke's Dutch arm recalled all products that had come from its Belgium plant. The entire episode left more than 200 Belgians and French, mostly school children, ill after drinking the Coke produced at Antwerp and Dunkirk. The company had to assure its British customers that the products made in its UK factories were safe. By June 15, 1999, Coke had recalled about 30 million cans and bottles, the largest ever product recall in its 113-year history. For the first time, the entire inventory of Coke's products from one country was banned from sale. As part of a damage control exercise, Coke sent a team of scientists to Europe. During its visit to Europe after a week of these incidents, Coke's Chairman and CEO Michael Douglas Ivester said, "We deeply regret any problems encountered by our European consumers in the past few days." Coke Belgium even announced that it would reimburse the medical expenses for people who had become ill after consuming its products. Keeping in the view facts of the case answer the following questions :

- (i) What are the ethical issues involved in the above case ?

- (ii) *What remedial actions should have been taken by the Coke factories ?*
(5 marks each)
- (b) *Explain in brief :*
- (i) *The ethical issues faced by human resource management.*
 - (ii) *Four fold duties of a king as suggested by Kautilya in Arthshastra.*
 - (iii) *'Value Driven' of a good ethics program.*
 - (iv) *The principle of 'Investor Activism' based on Adi Godrej Committee report.*
 - (v) *The principle 'Avoid Illicit Activities' propounded by the Caux Round Table for responsible business.* (2 marks each)
- (c) *"The Companies Act, 2013 has introduced some radical changes in the sphere of Corporate Governance to ensure the good Corporate Governance in India". In this context, state the provisions introduced by the Companies Act, 2013 to boost the Corporate Governance practices in India.* (5 marks)

Answer 1(a)(i)

The case study embraces numerous ethical issues. Some of them are as under:

1. The company lacked in exercising strict quality control measures and advertantly or inadvertently allowed their products in the market which caused injury to health of many consumers, especially children.
2. When company was aware that their product are/could be used by children and teenagers who are more vulnerable section of the society, the company must have exercised extra care and due diligence in shipping the product to the market.
3. Company recalled its product from the market after Belgium Health Ministry announced a ban on its products. Thus, company adopted reactive approach rather than a proactive approach.
4. When company came to know about first incident of child illness, it must have recalled the entire lot of its products from the market acting swiftly, as it is a quite sensitive issue associated with the health of children.
5. The company never acknowledged or took action on the reports of 'unusual odour' and 'off taste' in the drink. The company owe a responsibility and are answerable to the customers.
6. Even after being aware about the incidents of child illness, the company kept continuing to assure its British consumers that the products produced in UK factories are safe.
7. Lastly, company considered itself free from its ethical liability by issuing a regret from the side of its Chairman and CEO.

Answer 1(a)(ii)

The Company should have taken the following remedial actions:

1. The Company must have strengthened its quality control checks and measures as per the international standards so as to be safe for consumption by all segments of the consumers.

2. The Company must have been proactive in its approach and should have recalled the entire lot of its product from the markets, and issued a warning not to use its products till the quality issue involved is resolved, as soon as the first case of child illness came to its notice.
3. Adequate and elaborate arrangements for the treatment of children, who suffered from various illness after consuming coke must have been made by the company.
4. Families of children who suffered illness after consuming coke must have been adequately compensated.
5. Coke products must have been thoroughly investigated to know the reasons behind child illness and foreign element in coke which caused the illness.
6. As soon as the company would have come to know about the reason of illness in children who consumed coke, prompt remedial actions should have been taken by the company to set right the deficiency and bring up the product on par with its expected quality.

Answer 1(b)

- (i) Human resource management (HRM) plays a decisive role in introducing and implementing ethical practices in an organisation. Ethics should be a pivotal issue for HR specialists. The ethics of human resource management (HRM) covers those ethical issues that arise around the employer-employee relationship, such as the rights and duties' issues between the employer and employee.

The ethical issues faced by HRM include:

- Discrimination issues, i.e., discrimination on the basis of age, gender, race, religion, disabilities etc.
- Sexual harassment.
- Affirmative Action.
- Issues surrounding the representation of employees and the democratization of the workplace and trade unionisation.
- Issues affecting the privacy of the employee: workplace surveillance, drug testing, etc.
- Discrimination of whistle-blowers.
- Issues relating to the fairness of the employment contract and the balance of power between the employer and employee.
- Occupational safety and health issues.

- (ii) Kautilya's fourfold duty of a king–

The substitution of the state with the corporation, the king with the CEO or the board of a corporation, and the subjects with the shareholders, bring out the quintessence of corporate governance, because central to the concept of corporate governance is the belief that public good should be ahead of private good and that the corporation's resources cannot be used for personal benefit. According to Kautilya, the duties of the king are:

- i. *Raksha* – literally means protection, in the corporate scenario it can be equated with the risk management aspect.

- ii. *Vridddhi* – literally means growth, in the present day context can be equated to stakeholder value enhancement.
 - iii. *Palana* – literally means maintenance/compliance, in the present day context it can be equated to compliance to the law in letter and spirit.
 - iv. *Yogakshema* – literally means well-being and in Kautilya's Arthashastra it is used in context of a social security system. In the present day context it can be equated to corporate social responsibility.
- (iii) A company must have an effective ethics programme to ensure that all employees understand organisational values and comply with the policies and code of conduct that create its ethical climate. 'Value driven' is one of the factors which determines the success of an ethics program.

'Value-driven' means that the ethical and compliance programme is based on certain values. This will have the most positive effect on ethics and compliance programme and will result in:

- condemning unethical conduct;
- stronger employee commitment;
- Stronger employee involvement and commitment.

- (iv) In March 2012, the Ministry of Corporate Affairs constituted a Committee to formulate a Policy Document on Corporate Governance under the chairmanship of Mr. Adi Godrej with the President ICSI as Member Secretary/ Convenor. The Adi Godrej Committee submitted its report which was articulated in the form of 17 Guiding Principles of Corporate Governance.

Investor Activism is one of these principles, which depicts that India Inc. can no longer expect shareholders to remain passive. Not just big institutional investors, but even minority shareholders are now turning increasingly assertive to influence corporate decision-making. Recent developments in the financial markets and in business practices suggest a growing trend in shareholder activism, wherein investors attempt to influence management and corporate practices by raising pertinent questions.

- (v) The Caux Round Table (CRT) Principles for Responsible Business set forth ethical norms for acceptable businesses behaviour. The principles also have a risk management foundation - because good ethics is good risk management. And they balance the interests of business with the aspirations of society to ensure sustainable and mutual prosperity for all. 'Avoid illicit activities' is its 7th Principle which is as follows:

Principle 7 – Avoid Illicit Activities

- A responsible business does not participate in, or condone, corrupt practices, bribery, money laundering, or other illicit activities.
- A responsible business does not participate in or facilitate transactions linked to or supporting terrorist activities, drug trafficking or any other illicit activity.
- A responsible business actively supports the reduction and prevention of all such illegal and illicit activities.

Answer 1(c)

The Companies Act, 2013 has introduced radical changes in the sphere of Corporate Governance in India. It has majorly overhauled the Corporate Governance norms and has far-reaching implications on the manner in which corporates operate in India. Some of the provisions of Companies Act, 2013 related to Corporate Governance are as under:

1. Appointment and maximum tenure of Independent Directors;
2. Separate meeting of Independent Directors;
3. Appointment of Woman Director;
4. Appointment of Whole time Key Managerial Personnel;
5. Performance Evaluation of the Directors and Board as a whole;
6. Enhanced disclosures and assertions in Board Report and Annual Return with regard to Managerial Remuneration, risk management, internal control for financial reporting, legal compliance, Related Party Transactions, Corporate Social Responsibility, shareholding pattern, public money lying unutilized, etc.
7. Stricter yet forward-looking procedural requirements for Secretarial compliances and ICSI Secretarial Standards made mandatory;
8. Enhanced compliances of Related Party Transactions and introduction of concept of arm's length pricing;
9. Enhanced restrictions on appointment of Auditors and mandatory rotation of Auditors;
10. Separation of role of Chairperson and Chief Executive Officer;
11. Mandatory provisions regarding vigil mechanism;
12. Constitution of Nomination and Remuneration Committee;
13. Constitution of CSR Committee with minimum one Independent Director and formulation of CSR policy to spend 2% of average Net Profits during the three immediately preceding financial years in pursuance of CSR policy;
14. Secretarial Audit for the bigger companies;
15. Certification of Annual Return;
16. Appointment of Resident Director.

Attempt all parts of either Q. No. 2 or Q. No. 2A

Question 2

- (a) *Preferential Life Insurance Ltd. was incorporated to conduct the insurance business. The Certificate of Registration was issued to the company on 1st June, 2014. The Board of Directors of the company consists of five directors, out of which two directors are independent directors.*

- (i) *Is the composition of Board of Directors of the Company valid ? (3 marks)*
- (ii) *Would your answer be different if Certificate of Registration to the company be issued on 1st April, 2017 ? (2 marks)*
- (b) *Confederation of Indian Industry (CII) has developed a Desirable Corporate Governance Code to develop and promote the Corporate Governance adopted and followed by Indian Companies. State the recommendations of the Code with regards to Audit Committee to be followed by Banks and Financial Institutions of an Indian industry. (5 marks)*
- (c) *Discuss the barriers in visionary leadership as listed out by Frank Martinelli to help companies identify them in their organizations and to remove them in order to facilitate visionary board leadership. (5 marks)*

OR (Alternate question to Q. No. 2)

Question 2A

- (i) *Mr. Ram has completed his one term of five years as independent director in Vigilant Electronics Ltd. on 31st March, 2019. The Board of Directors of the company passed the resolution to appoint him as independent director for one more term of five years.*
- (a) *Is the appointment of Mr. Ram as independent director for second consecutive term of five years valid ? Justify your answer. (3 marks)*
- (b) *Mr. Ram has completed two consecutive terms of five years as an independent director and after expiration of one year from cessation of the term as independent director, company wants to appoint him again as independent director, whether he can be appointed for the same ? Justify your answer. (2 marks)*
- (ii) *"Employees' participation is an important tool to ensure a good Corporate Governance system in an organization". Discuss and highlight the role played by the employees in ensuring a good Corporate Governance in a company. (5 marks)*
- (iii) *Discuss 'Leadership' and 'Effectiveness' principles of UK Corporate Governance Code, 2014. (5 marks)*

Answer 2(a)

The Insurance Regulatory and Development Authority of India (IRDAI) had revised its Guidelines in the light of changes brought in by the Companies Act, 2013 vide Circular dated 18th May, 2016.

As per these revised Guidelines, the Board of Directors of an Insurance company is required to have a minimum of three Independent Directors. However, this requirement is relaxed to two Independent Directors for initial five years from grant of Certificate of Registration to an insurance company.

- (i) Referring to the above provisions, since the period of five years has elapsed from the date of grant of Certificate of Registration to the insurance company,

therefore the company will be required to have minimum three Independent Directors on its Board w.e.f. 01.06.2019 and thus with the appointment of two Independent Directors, the composition of Board will be treated as invalid.

- (ii) However, if the company was granted Certificate of Registration on 1st April, 2017, the insurance company still has time to comply with the requirement of appointment of third Independent Director as the period of five years since grant of Certificate of Registration has not lapsed. Therefore, the composition of Board shall be treated as valid as on date.

Answer 2(b)

Confederation of Indian Industry (CII) took a special initiative on Corporate Governance, the first institutional initiative in Indian Industry. The objective was to develop and promote a code for Corporate Governance to be adopted and followed by Indian companies, whether in the Private Sector, the Public Sector, Banks or Financial Institutions, all of which are corporate entities. The final draft of the said Code was widely circulated in 1997. In April 1998, the Code was released. It was called Desirable Corporate Governance: A Code. It made recommendations in various fields of Corporate Governance like- frequency of Board meetings, composition of Board, number of directorships, non-executive directors, audit committee, etc.

Recommendations with regards to Audit Committee made by CII, including for Banks and Financial Institutions, are as follows:

1. Listed companies with either a turnover of over Rs.100 crores or a paid-up capital of Rs. 20 crores should set up Audit Committees within two years.
2. Composition: at least three members, all drawn from a company's non-executive directors, who should have adequate knowledge of finance, accounts and basic elements of company law.
3. To be effective, the Audit Committees should have clearly defined Terms of Reference and its members must be willing to spend more time on the company's work vis-à-vis other non-executive directors.
4. Audit Committees should assist the Board in fulfilling its functions relating to corporate accounting and reporting practices, financial and accounting controls, and financial statements and proposals that accompany the public issue of any security - and thus provide effective supervision of the financial reporting process.
5. Audit Committees should periodically interact with the statutory auditors and the internal auditors to ascertain the quality and veracity of the company's accounts as well as the capability of the auditors themselves.
6. For Audit Committees to discharge their fiduciary responsibilities with due diligence, it must be incumbent upon management to ensure that members of the committee have full access to financial data of the company, its subsidiary and associated companies, including data on contingent liabilities, debt exposure, current liabilities, loans and investments.
7. By the fiscal year 1998-99, listed companies satisfying criterion (1) should have in place a strong internal audit department, or an external auditor to do internal audits.

Answer 2(c)

Frank Martinelli has listed the barriers in visionary leadership with a view to assist companies in identifying them in their organizations and removing them to facilitate visionary board leadership. The barriers in visionary leadership are:

1. *Lack of Time Management* - Lack of time to attend meetings, read materials and maintain contact with each other in between meetings. The Board members need to organize themselves for maximum effectiveness and avoid wasting time on trivial matters.
2. *Resistance to risk taking* - In order to be innovative and creative in its decision-making, Boards must be willing to take chances, to try new things, to take risks. Success in new ventures is never to be taken for granted. Boards need to acknowledge the tension points and discuss them with funders and other key supporters. Board leadership must strike a balance between taking chances and maintaining the traditional stewardship role.
3. *Lack of Strategic Planning* - Strategic planning offers Boards an opportunity to think about changes and trends that will have significant impact and develop strategies to respond to challenges. Some Boards are not involved in strategic planning at all; others are involved in a superficial way. Therefore, the Boards lose an important opportunity to hone/exercise visionary leadership skills.
4. *Complexity* - Board members frequently lack a deep understanding of critical changes, trends and developments that challenge fundamental assumptions about how it defines its work and what success looks like. This lack of knowledge results in a lack of confidence on the part of the Board to act decisively and authoritatively.
5. *Micro Management* - It is necessary that the board focuses its attention on items of critical importance to the organization. If the Board is tempted to micro manage or to meddle in lesser matters, an opportunity to provide visionary leadership is lost.
6. *Clinging to Tradition* – Boards often resist change in order to preserve tradition. However, changing environment requires the Boards to be open to change. Maira and Scott - Morgan in “The Accelerating Organisation” point out that continuous shedding of operating rules is necessary because of changing environmental conditions. But shedding becomes more complicated in systems involving human beings, because their sense of self-worth is attached to many old rules. This human tendency to hold on to the known prevents boards from considering and pursuing new opportunities which conflict with the old rules.
7. *Confused Roles* - Some Boards assume that it is the job of the executive director to do the visionary thinking and that the board will sit and wait for direction and inspiration. This lack of clarity can result in Boards that do not exercise visionary leadership because they do not think it is their job.
8. *Past Habit* - Time was when clients, members and consumers would just walk in through the door on their own. Viewing things in this way, boards did not consider market place pressures, or for that matter a competitive marketplace.

All that has changed, yet for many Boards their leadership style has not kept pace with this new awareness.

Answer 2A(i)

According to Section 149(10) & (11) subject to the provisions of Section 152(2) of Companies Act, 2013, an Independent Director shall hold office for a term up to five consecutive years on the Board of a company, but shall be eligible for reappointment on passing of a special resolution by the company and disclosure of such appointment in the Board's report.

No Independent Director shall hold office for more than two consecutive terms, but such independent director shall be eligible for appointment after the expiration of three years of ceasing to become an independent director.

- (a) Referring the above provisions, we can conclude that appointment of Mr. Ram as Independent Director for second consecutive term is not valid as instead of passing a special resolution in general meeting, the board has passed the resolution for his appointment in its meeting, which appears to be an ordinary resolution. The members should have passed a special resolution.
- (b) As per the provisions discussed above, Mr. Ram cannot be appointed as Independent Director for the third term after expiration of one year from the cessation of two consecutive terms of five years. A cooling period of minimum three years is required for his re-appointment.

Answer 2A(ii)

There is a growing belief that capital contributed by shareholders alone cannot do miracle and labour is also an equally important factor of the production. Employee participation in Corporate Governance system is also playing an important role by ways of the following:

1. *Right to consultation* - where employees must be consulted on certain management decisions. This right increases transparency of management decisions and allows employee opinion to ameliorate the asymmetry of information between management and the market.
2. *Right to nominate/vote for supervisory board members* - In many cases employee participation on the board is mandated. This right creates a check and balance system between management and the supervisory board, which in turn creates the perception of greater fairness.
3. Compensation/privatization programs that make employees holders of shares, thereby empowering employees to elect the board members, which, in turn holds management responsible.
4. *Participation in the capital*: Employees may be partner in the capital contribution. They may be given the shares under the ESOP scheme. This will create the belongingness of the ownership concept among the employees meaning thereby owner as well as employee. This will lead to the improved employee commitment and buy-in to management's goals side by side the alignment of interest between employees and shareholders. It may support the emergence of more transparent and effective corporate governance.

5. *Profit sharing* : The profit-sharing plans should be broad-based (all or most employees) rather than for executives only. This can be done in a variety of ways like: Cash-based sharing of annual profits, deferred profit-sharing. The advantages of this are: it encourages employee involvement, improves motivation, improves distribution of wealth and wage flexibility and can improve firm performance.
6. *Whistle Blower Policy* : A whistle blower is the one who exposes wrongdoing, fraud, corruption or mismanagement in an organization. A whistle blower is a person who publicly complains/discloses the concealed misconduct on the part of an organization or body of people, usually from within that same organisation. Whistle blower may be an employee, former employee, vendor, customer or other stakeholder. Whistle blowers are important stakeholders as they can work as a tool for authorities to get information of deviant behaviour or practices in organizations.

Answer 2A(iii)

The UK Corporate Governance Code, 2014 has evolved some Principles which are divided into five sections viz. Section A - Leadership, Section B - Effectiveness, Section C - Accountability, Section D- Remuneration and Section E - Relationship with shareholders.

Section A: Leadership

1. *The Role of the Board* - Every company should be headed by an effective board which is collectively responsible for the long-term success of the company.
2. *Division of Responsibilities* - There should be a clear division of responsibilities at the head of the company between the running of the board and the executive responsibility for the running of the company's business. No one individual should have unfettered powers of decision.
3. *The Chairman* -The Chairman is responsible for leadership of the board and ensuring its effectiveness on all aspects of its role.
4. *Non-Executive Directors* - As part of their role as members of a unitary board, non-executive directors should constructively challenge and help develop proposals on strategy.

Section B: Effectiveness

1. *The Composition of the Board* - The board and its committees should have the appropriate balance of skills, experience, independence and knowledge of the company to enable them to discharge their respective duties and responsibilities effectively.
2. *Appointments to the Board* - There should be a formal, rigorous and transparent procedure for the appointment of new directors to the board.
3. *Commitment* - All directors should be able to allocate sufficient time to the company to discharge their responsibilities effectively.
4. *Development* - All directors should receive induction on joining the board and should regularly update and refresh their skills and knowledge.

5. *Information and Support* - The board should be supplied in a timely manner with information in a form and of a quality appropriate to enable it to discharge its duties.
6. *Evaluation* - The board should undertake a formal and rigorous annual evaluation of its own performance and that of its committees and individual directors.
7. *Re-election* - All directors should be submitted for re-election at regular intervals, subject to continued satisfactory performance.

Question 3

- (a) *“As fraud is a deliberate action to deceive others to gain advantage, a sound Fraud Risk Management Policy is required to deal with such activities”. In this context design the policy following the subject guidelines and submit it to the Board for its perusal and approval.*
- (b) *“An ethical profile brings together all the factors which affect a company’s reputation, by examining the way in which it does its business.” Explain the suggested steps of auditing the ethical practices to be followed by the company.*
- (c) *Discuss the challenges in exercising shareholder’s rights under Organization for Economic Co-operation and Development (OECD) principles on Corporate Governance. (5 marks each)*

Answer 3(a)

To,

The Board of Directors.

.....Ltd.

Subject: Formulation of the Fraud Risk Management Policy

Dear Sir,

Fraud Risk Management Policy of our company can be formulated keeping in view the following guidelines:

1. *Defining fraud* : This shall cover activities which the company would consider as fraudulent.
2. *Defining Role & responsibilities* : The policy may define the responsibilities of the officers who shall be involved in effective prevention, detection, monitoring & investigation of fraud. The company may also consider constituting a committee or operational structure that shall ensure an effective implementation of anti-fraud strategy of the company. This shall ensure effective investigation in fraud cases and prompt as well as accurate reporting of fraud cases to appropriate regulatory and law enforcement authorities.
3. *Communication channel* : Encourage employees to report suspicious cases of fraud/misconduct. Any person with knowledge of suspected or confirmed incident of fraud/misconduct must report the case immediately through effective and efficient communication channel or mechanism.

4. *Disciplinary action* : After due investigations disciplinary action against the fraudster may be considered as per the company's policy.
5. *Reviewing the policy* : The employees should educate their team members on the importance of complying with Company's policies & procedures and identifying/ reporting of suspicious activity, where a situation arises. Based on the developments, the policy should be reviewed on periodical basis.

Submitted for perusal and approval.

Date:

Sd/-

Place:

Company Secretary

Answer 3(b)

An ethical profile brings together all the factors which affect a company's reputation by examining the way in which it does business.

The reasons for examining the state of a company's ethics are many and various. They include external societal pressures, risk management, stakeholder obligations, and identifying a baseline to measure future improvements. In some cases, companies are driven to it by a gross failure in ethics, which may have resulted in costly legal action or stricter Government regulation.

The following are the some of the suggested steps in ethics audit:

1. The first step in conducting an audit is securing the commitment of the firm's top management.
2. The second step is establishing a committee or team to oversee the audit process.
3. The third step is establishing the scope of the audit.
4. The fourth step should include a review of the firm's mission values, goals, and policies.
5. The fifth step is identifying the tools or methods that can be employed to measure the firm's progress and then collecting and analyzing the relevant information.
6. The sixth step is having the results of the data analysis verified by an independent party.
7. The final step in the audit process is reporting the audit findings to the Board of Directors and top executives and, if approved, to external stakeholders.

Social and ethical accounting, auditing and reporting are in embryonic stage. The best practices are gradually emerging and will continue to develop over the coming years. Social and ethical accounting provides a way in which companies can assess their performance and bring the perspective of stakeholders into this assessment. By bringing social and ethical accountability process into its strategy and operations, a company can measure its performance for itself and for its stakeholders as well. This will help a company to address a series of risks that may otherwise arise unseen and unchecked with any of the stakeholder.

Answer 3(c)

Principle III of the OECD Principles on Corporate Governance states that the corporate governance framework should ensure the equitable treatment of all shareholders, including minority and foreign shareholders. All shareholders should have the opportunity to obtain effective redress for violation of their rights.

The rights of shareholders have been well secured in the legislative framework. That is to say that the law is in place to secure the rights of the shareholders. All shareholders of the same class have the same rights. If that be so what is the challenge? The Challenges can be understood as below:

Shareholders can be classified as dominant shareholders and minority shareholders. In general parlance dominant shareholders are those, who by virtue of their majority shareholding or their association with the company as its founders or for any other reason are able to exercise control in the management of the company.

One of the basic challenges in exercising the shareholder rights stems from information asymmetry between the dominant shareholders and the minority shareholders. This could be attributed to lack of timely disclosure of accurate information on important matters which is crucial for the protection of shareholders' rights for two main reasons. First, shareholders need to have access to information about important matters to make decisions that are in their interests. Second, information disclosure is crucial in preventing managers and dominant shareholders from engaging in activities that are detrimental to minority shareholders.

Another major challenge arises on account of lack of awareness amongst the small shareholders as their rights leading towards a passive approach to voting.

Question 4

- (a) *You are the Company Secretary of ABC Ltd. The annual turnover of your company as per last audited financial statement has crossed ₹100 crores. As per requirement of Section 177 (1) of the Companies Act, 2013 your company constituted an Audit committee. Explain the powers of Audit committee provided under the section 177 (5) and (6) of the Companies Act, 2013.*
- (b) *“The European Corporate Governance Institute (ECGI) was established to improve Corporate Governance through fostering independent scientific research and related activities”. Discuss.*
- (c) *“Internal control Systems are the policies and procedures”, practices and organizational structures, designed to provide reasonable assurance that business objectives will be achieved and that undesirable events prevented or detected and corrected”. Discuss and explain the prerequisites of an effective control system. (5 marks each)*

Answer 4(a)

Audit Committee is one of the main pillars of the corporate governance mechanism in any company. The Committee is charged with the principal oversight of financial reporting and disclosure and aims to enhance the confidence in the integrity of the

company's financial reporting, the internal control processes and procedures and the risk management systems.

Section 177(5) and (6) of the Companies Act, 2013 provides powers of the Audit Committee, which are as follows:

1. The Audit Committee has the power to call for the comments of the auditors about internal control systems, the scope of audit, including the observations of the auditors and review of financial statement before their submission to the Board and may also discuss any related issues with the internal and statutory auditors and the management of the company.
2. The Audit Committee has authority to investigate into any matter in relation to the items specified in terms of reference or referred to it by the Board and for this purpose the Committee has power to obtain professional advice from external sources. The Committee for this purpose shall have full access to information contained in the records of the company.
3. The auditors of a company and the key managerial personnel have a right to be heard in the meetings of the Audit Committee when it considers the auditor's report but shall not have the right to vote.

Answer 4(b)

The European Corporate Governance Institute (ECGI) was founded in 2002. It has been established to improve corporate governance through fostering independent scientific research and related activities.

The ECGI is an international scientific non-profit association. It provides a forum for debate and dialogue between academics, legislators and practitioners, focusing on major corporate governance issues and thereby promoting best practices.

Its primary role is to undertake, commission and disseminate research on corporate governance. Based upon impartial and objective research and the collective knowledge and wisdom of its members, it advises on the formulation of corporate governance policy and development of best practice and undertake any other activity that will improve understanding and exercise of corporate governance.

It acts as a focal point for academics working on corporate governance in Europe and elsewhere, encouraging the interaction between the different disciplines, such as economics, law, finance and management.

The Institute articulates its work by expanding on the activities of the European Corporate Governance Network, disseminating research results and other relevant material.

It draws on the expertise of scholars from numerous countries and brings together a critical mass of expertise and interest to bear on this important subject.

Answer 4(c)

The Information Systems Control and Audit Association (ISACA) has defined the Internal Control Systems as, "The policies and procedures, practices and organizational

structures, designed to provide reasonable assurance that business objectives will be achieved and that undesired events will be prevented or detected and corrected”.

For effective implementation of the internal control system, the followings are pre-requisites:

1. There should be clear division of the work.
2. Segregation of the work should be in such a manner that the work done by one person is the beginning of the work for another person.
3. There should be the clarity of the responsibility.
4. The work flow process be documented or standardized so that the staff may perform the work as suggested in the work flow chart.
5. No single persons should be allowed to have access or control over any important business operation.
6. There should be rotation of the staff duties periodically.
7. Staff should be asked to go on mandatory leave periodically so that other person may come to know if someone is playing foul with the system.
8. Persons having the charge of the important assets should not be allowed to have access to the books of accounts.
9. Periodical inspection of the physical assets be carried out to ensure its physical existence as well in good working conditions.
10. The valuable items like cash and others, to be physically inspected and the periodicity of investigation should be at irregular intervals, so that the person under whose charge the assets are, cannot know in advance, when the inspection will took place and manage the affairs.

PART B

Question 5

- (a) *Goyal Associates Ltd. New Delhi reported net profits of ₹8 crore, ₹10 crore and ₹12 crore in the Financial Years 2016-17, 2017-18 and 2018-19 respectively as per the profit and loss statements prepared by the company in terms of section 381(i) (a) and section 198 of the Companies Act, 2013. Calculate the amount of CSR expenditure amount to be spent in the Financial Year 2019-20 bearing the following facts in mind :*
- (i) *Dividend income of the company in Financial Year 2016-17 of ₹5 Lakh from the other Indian Companies and the net profits includes an amount of ₹1.5 crore profits earned by its overseas branches.*
 - (ii) *Net profits of the company in Financial Year 2017-18 include an amount of ₹1.0 crore of dividend income from Indian companies and ₹1.0 crore profits made by its overseas branches.*
 - (iii) *Net profits of the company in the Financial Year are inclusive of ₹2.0 crore profits made by its overseas branches.*
- (5 marks)*

(b) "Sustainability is an emerging mega trend in India and is a measure of good Corporate Governance." Comment and explain role of the Government for improving sustainable reporting. (5 marks)

(c) Discuss the implications of Rule of Strict/Absolute liability as prescribed in Rylands Vs. Fletcher. (5 marks)

Answer 5(a)

As per section 135 of the Companies Act 2013, the CSR provision will be applicable to companies which fulfil any of the following criteria during any of the three preceding financial years:

- Companies having net worth of rupees five hundred crore or more, or
- Companies having turnover of rupees one thousand crore or more or
- Companies having a net profit of rupees five crore or more

The companies which fulfil the criteria under section 135 are required to spend 2% of the average net profits of the preceding three financial years as CSR expenditure.

Moreover, while calculating net profits for any financial year, in case of Indian company, income from dividend received from another Indian company which falls within the criteria of section 135 and complying with the provisions of Section 135 and profits made by the company from its overseas branches will be excluded.

Keeping the above facts in consideration-

Net profits earned by the company for FY 2016-17 are	Rs. 8 crore
<i>Less</i> : amount of dividend received from Indian companies	(Rs. 5 lakh)
<i>Less</i> : profit earned by its overseas branch	(Rs. 1.5 crore)
	Rs. 6.45 crore
Net profits earned by the company for FY 2017-18 are	Rs. 10 crore
<i>Less</i> : amount of dividend received from Indian company	(Rs. 1 crore)
<i>Less</i> : profits made by its overseas branches	(Rs. 1 crore)
	Rs. 8 crore
Net profits earned by the company for FY 2018-19 are	Rs. 12 crore
<i>Less</i> : Profits made by its overseas branches	(Rs. 2 crore)
	Rs. 10 crore

(Note: in point no. (iii) the financial year to which profits of Rs. 2 crore made by company's overseas branch is not mentioned, hence the question is solved assuming it to be for FY 2018-19)

Thus, average net profits of the preceding three years are:

$(Rs. 6.45 \text{ crore} + Rs. 8 \text{ crore} + Rs. 10 \text{ crore})/3 = Rs. 24.45 \text{ crore}/3 = Rs. 8.15 \text{ crore}$

CSR Expenditure of 2% = $Rs. 8.15 \text{ crore} * 2\% = Rs. 16,30,000$

Thus, company has to spend Rs. 16,30,000 as CSR expenditure for FY 2019-20

Answer 5(b)

Sustainability is an emerging megatrend and is a measure of good corporate governance. Over the years, environmental issues have steadily encroached on businesses' capacity to create value for the customers, shareholders, and other stakeholders. Globalized workforces and supply chains have created environmental pressures and attendant business liabilities. The rise of new world powers has intensified competition for natural resources (especially oil) and added a geopolitical dimension to sustainability. "Externalities", such as carbon dioxide emissions and water use are fast becoming materials-meaning that investors consider them central to a firm's performance and stakeholders expect companies to share information about them.

These forces are magnified by escalating public and Governmental concern about climate change, industrial pollution, food safety, and natural resource depletion, among other issues. Consumers in many countries are seeking out sustainable products and services or leaning on companies to improve the sustainability of traditional ones.

Further, thousands of companies are placing strategic bets on innovation in energy efficiency, renewable power, resource productivity, and pollution control. In the end, it can be concluded that the top management of an organisation can no longer afford to ignore sustainability as a central factor in their companies' long-term competitiveness.

Government's Role in improving sustainable reporting

Considering the importance of sustainability in businesses, MCA launched Corporate Social Responsibility Voluntary Guidelines in 2009. This voluntary CSR Policy addresses six core elements – Care for all Stakeholders, Ethical functioning, Respect for Workers' Rights and Welfare, Respect for Human Rights, Respect for Environment and Activities for Social and Inclusive Development.

To take this further, in 2011 MCA issued 'National Voluntary Guidelines on Social, Environmental and Economical Responsibilities of Business' which encourages reporting on environment, social and governance issues. In line with the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business and considering the larger interest of public disclosure regarding steps taken by listed entities from an Environmental, Social and Governance ("ESG") perspective, SEBI decided to mandate inclusion of Business Responsibility Reports ("BRR reports") as part of the Annual Reports for listed entities.

SEBI in its (Listing Obligations and Disclosure Requirements) Regulations, 2015 has mandated the requirement of submission of BRR for top 1000 listed entities describing initiative taken by them from an environmental, social and governance perspective in the prescribed format [Regulation 34(2)(f)].

Further, in order to align the NVGs with the Sustainable Development Goals (SDGs)

and the 'Respect' pillar of the United Nations Guiding Principles (UNGP) the process of revision of NVGs was started in 2015. In March 2019, the Ministry of Corporate Affairs has revised the National Voluntary Guidelines on the Social, Environmental and Economic Responsibilities of Business (NVGs) and has released the National Guidelines on Responsible Business Conduct (NGRBC). These principles urge businesses to actualize the principles in letter and spirit.

(Note: In terms of amendment to regulation 34 (2) (f) of SEBI LODR Regulations vide Gazette notification no. SEBI/LAD-NRO/GN/2021/22 dated May 05, 2021, it has now been decided to introduce new reporting requirements on ESG parameters called the Business Responsibility and Sustainability Report (BRSR). W.e.f. the financial year 2022-2023, whereby filing of BRSR shall be mandatory for the top 1000 listed companies (by market capitalization) and shall replace the existing BRR. Filing of BRSR is voluntary for the financial year 2021-22.)

Answer 5(c)

In the past, all actions for environmental torts against companies and industries were governed by the principle of strict liability. Strict liability means liability without fault, i.e., without intention or negligence. In other words, the defendant is held liable without fault. Absolute liability for the escape of impounded waters was first established in England during the mid-nineteenth century in the case of *Rylands v. Fletcher, (1868)* LR 3 330. The rule was first stated by Blackburn, J. (Court of Exchequer) in the following words:

"We think that that the rule of law is, that the person who for his own purposes brings on his lands and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril, and, if he does not do so, is prima facie answerable for all the damage which is the natural consequence of its escape. He can excuse himself by showing that the escape was owing to the plaintiff's default; or perhaps that the escape was the consequence of vis major or the act of God..... and it seems but reasonable and just that the neighbour, who has brought something on his own property which was not naturally there, harmless to others so long as it is confined to his own property, but which he knows to be mischievous if it gets on his neighbour's, should be obliged to make good the damage which ensues if he does not succeed in confining it to his own property".

This passage of Blackburn's opinion established broad liability for land owners whose land development activities result in the unexpected release of a large volume of water.

The liability under this rule is strict and it is no defence to say that the thing escaped without person's willful act, default or neglect or even with the excuse that he had no previous knowledge of its existence. The House of Lords, however, added a rider to the above statement stating that – this rule applies only to non-natural user of the land and it does not apply to things naturally established on the land or where the thing escaped due to an act of God or an act of stranger or the default of the person injured or where the thing which escapes is present by the consent of the person injured or in certain cases where there is statutory authority.

American courts began dealing with Rylands, absolute liability soon after the House of Lords issued its Rylands opinion. The first American jurisdiction to apply the Rylands Doctrine was Massachusetts, where a court imposed absolute liability on a defendant

who allowed filthy water to percolate into a neighbour's well. Shortly thereafter, Minnesota adopted Rylands absolute liability in a case involving the breach of an underground water tunnel.

Attempt all parts of either Q. No. 6 or Q. No. 6A

Question 6

Discuss in brief:

- (a) *Five sections of Business Responsibility Report framework.*
- (b) *Government encouragement as a challenge in Mainstreaming Sustainability Reporting.*
- (c) *'The Capital' in Corporate Sustainability Reporting Frameworks.*
- (d) *Communication on Progress.*
- (e) *United Nations Conference on Environment and Development. (3 marks each)*

OR (Alternate question to Q. No. 6)

Question 6A

- (i) *Kyosei philosophy reflects a confluence of social, environmental, technological and political solutions. Elaborate.*
- (ii) *Discuss the commitments adopted under Rio+20 outcome document.*
- (iii) *"Sustainable Development indicates development that meets the need of the present generation without compromising with the ability of the future generations to meet their needs." Comment and point out principles of sustainable development which are universally acceptable (5 marks each)*

Answer 6(a)

Business Responsibility Report has been designed to provide basic information about the company, information related to its performance and processes, and information on principles and core elements of the Business Responsibility Reporting.

The BRR framework is divided into five sections:

- (a) *Section A : General Information about the Organisation – Industry Sector, Products & Services, Markets, other general information*
- (b) *Section B : Financial Details of the Organisation – Paid up capital, Turnover, Profits, CSR (Corporate Social Responsibility) spend.*
- (c) *Section C : Other Details – BR initiatives at Subsidiaries and Supply-chain Partners*
- (d) *Section D : BR Information – Structure, Governance & Policies for Business Responsibility*
- (e) *Section E : Principle-wise Performance – Indicators to assess performance on the Nine Business Responsibility principles as envisaged by the National Voluntary Guidelines (NVGs).*

Answer 6(b)

Since Sustainability reporting is relatively a new concept many organisations find it difficult to prepare sustainability report. Government encouragement is one of the considered challenge in mainstream sustainability reporting.

In many jurisdictions, there are no guidelines on sustainability reporting to encourage the corporate sector. While on the other hand, there are voluntary as well as mandatory guidelines from regulators for reporting on sustainability aspects like in India we have SEBI framework of Business Responsibility Report. In South Africa, listed companies are required to prepare Integrated Report which is one step ahead of sustainability reporting. It is the need of the hour that Governments should encourage the corporate in their jurisdiction to adopt the sustainability reporting as a measure of good corporate governance.

Answer 6(c)

An integrated report aims to provide insight about the resources and relationships used and affected by an organization – these are collectively referred to as “the capitals” in sustainability reporting. It also seeks to explain how the organization interacts with the external environment and the capitals to create value over the short, medium and long term. The capitals are stocks of value that are increased, decreased or transformed through the activities and outputs of the organization.

They are categorized in this Framework as financial, manufactured, intellectual, human, social and relationship, and natural capital, although organizations preparing an integrated report are not required to adopt this categorization or to structure their report along the lines of the capitals. The ability of an organization to create value for itself enables financial returns to the providers of financial capital. This is interrelated with the value the organization creates for stakeholders and society at large through a wide range of activities, interactions and relationships. When these are material to the organization's ability to create value for itself, they are included in the integrated report.

Answer 6(d)

UN Global Compact incorporates a transparency and accountability policy known as the Communication on Progress (COP). The Communication on Progress (COP) is an annual disclosure to stakeholders on progress made in implementing the ten principles of the UN Global Compact in the areas of human rights, labour, environment and anti-corruption, and in supporting broader UN development goals. The COP is posted on the Global Compact website by business participants. Failure to issue a COP will change a participant's status to non-communicating and can eventually lead to the expulsion of the participant. Purpose:

- a) The COP helps drive continuous sustainability performance improvement within the company. The library of COPs at the UN Global Compact website represents the largest repository of corporate practices in sustainability.
- b) The COP provides investors with sustainability performance information of companies, thus allowing for a more effective integration of environmental, social and governance (ESG) considerations in their investments and resulting in a more effective allocation of capital.

- c) The COP is an important demonstration of a company's commitment to transparency and accountability and it serves as an effective tool for multi-stakeholder dialogue.

Answer 6(e)

The United Nations Commission on Sustainable Development (CSD) was established by the UN General Assembly in December 1992 to ensure effective follow-up of United Nations Conference on Environment and Development (UNCED) (known as the Earth Summit) held in Rio De Janeiro. The following documents were the outcome of the Rio Summit:

- (a) *Agenda 21* – is a blueprint on how to make development socially, economically and environmentally sustainable.
- (b) *The Rio Declaration on Environment and Development* – it has 27 principles defining the rights and responsibilities of nations as they pursue human development and well-being.
- (c) *A statement of forest principles* – they guide the management, conservation and sustainable development of all types of forests, as essential to economic development and the maintenance of all forms of life.
- (d) *The United Nations Framework Convention on Climate Change* – aims to stabilize greenhouse gas concentrations in the atmosphere at levels that would prevent dangerous human induced interference with the climate system.
- (e) *The Convention on Biological Diversity* – it requires the countries to adopt ways and means to conserve the variety of living species, and ensure that the benefits from using biological diversity are equitably shared.
- (f) *Montreal Protocol on Substances that Deplete the Ozone Layer* was designed to reduce the production and consumption of ozone depleting substances.

Answer 6A(i)

“Kyosei” is a Japanese technique meaning “a spirit of cooperation”. A concise definition of this word would be "living and working together for the common good," but for some, the definition is broader: "All people, regardless of race, religion or culture, harmoniously living and working together into the future.

Kyosei philosophy reflects a confluence of social, environmental, technological and political solutions. It believes that peace, prosperity and social and environmental improvement come through positive action.

It works in five stages -

- First is economic survival of the company
- Second is cooperating with labour
- Third is cooperating outside the company
- Fourth is global activism, and
- Fifth is making the government/s a Kyosei partner

In the first stage of Kyosei, a company must work to secure a predictable stream of profits and to establish strong market positions. At this stage corporate is at the stage of evolution and it is concerned with profit making and its economic survival.

From this foundation, it moves on to the second stage, in which managers and workers resolve to cooperate with one another, recognizing that both groups are vital to the company's success.

In the third stage, this sense of cooperation is extended beyond the company to encompass customers, suppliers, community groups, and even competitors. At this stage company assumes local social responsibilities. Companies respect the interests of their own stakeholders, customers, staff, shareholders, suppliers, competitors and the local community.

At the fourth stage, a company takes the cooperative spirit beyond national boundaries and addresses some of the global imbalances. At this stage company assumes global social responsibilities. It begins to take care of all its direct stakeholders, including its local community and beyond.

In the fifth stage, the social responsibilities of the company transcend national boundaries and it urges its national government to work towards rectifying global imbalances. At the global level Kyosei will address Trade imbalances, Income imbalances, Environmental imbalances by advocating political, economic and educational reform.

Answer 6A(ii)

The Rio+20 outcome document "The Future We Want" resolved to establish an inclusive and transparent inter-governmental process on Sustainable Development Goals (SDGs) that is open to all stakeholders with a view to develop global sustainable development goals agreed by the UNGA. The outcome document mandated the creation of an inter-governmental Open Working Group that will submit a report to the UN General Assembly containing a proposal for consideration and appropriate action to be taken for sustainable development goals.

Following are some commitments adopted under Rio+20 outcome document:

1. *Poverty Eradication* : poverty eradication should be given highest priority within UN agenda.
2. *Food Security and Nutrition and Sustainable Agriculture* : commitment of the right of everyone to have access to safe, sufficient and nutritious food, importance of sustainable agriculture and recognition to the importance of addressing the access of rural communities to credit, financial services, markets, land tenure, health care and social services.
3. *Energy: critical role of energy in sustainable development* – access to sustainable modern energy contributes to poverty eradication, saves lives and improves health, essential to social inclusion and gender equality.
4. *Sustainable transport* : importance of environmentally sound, safe and affordable transportation as a means to improve social equity and health. Support development of sustainable transport systems, notably public mass transportation systems. Acknowledge that developing countries need assistance.

5. *Sustainable cities* : well planned and integrated cities can be economically, socially and environmentally sustainable - including housing, safe and healthy living environment for all, particularly the vulnerable; affordable and sustainable transport and energy, promotion and protection of safe and green urban spaces, water and sanitation, air quality, decent jobs and improved urban planning and slum upgrading. Recognize importance of mixed-use planning and non-motorized mobility - including by promoting pedestrian and cycling infrastructures.
6. *Health and population* : Health is a precondition for an outcome of and an indicator of all three dimensions of sustainable development. Sustainable development cannot be achieved in the presence of high burden on communicable/non-communicable diseases.
7. Commit to strengthen health systems toward the provision of equitable, universal coverage and promote affordable access to prevention, treatment, care and support related to NCDs, especially cancer, cardiovascular diseases, chronic respiratory diseases and diabetes.
8. Commit to establish or strengthen multi-sectoral national policies for the prevention and control of non-communicable diseases. Rio+20 was a 20-year follow-up to the 1992 Earth Summit/United Nations Conference on Environment and Development (UNCED) held in the same city, and the 10th anniversary of the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg.
9. Reaffirm the full right to use TRIPS provisions and Doha Declaration on TRIPS to promote access to medicines for all and encourage development assistance in this regard.
10. Call to strengthen health systems through increased financing and the recruitment/training/retention of health workers, improved distribution and access to medicines and improving health infrastructure.
11. Commit and consider population trends in development policy, emphasize need for universal access to reproductive health, including family planning and protection of human rights in this context.
12. Commit to reducing maternal and child mortality, gender equality and protection of human rights on matters related to sexuality, and work to ensure health systems, address sexual and reproductive health.
13. *Promoting full and productive employment, decent work for all, and social protections* : need to provide productive employment and decent work for all. Recognize importance of job creation. Workers should have access to education, skills and healthcare, including occupational health and safety.

Answer 6A(iii)

Sustainable Development indicates development that meets the needs of the present generation without compromising with the ability of the future generations to meet their own needs. The principle behind it is to foster such development through technological and social activities which meets the needs of the current generations, but at the same time ensures that the needs of the future generation are not impaired. For example, natural energy resources, like Coal and Petroleum etc., should be prudently used avoiding wastage so that the future generation can inherit these energy resources for their survival also.

This was reinforced at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. It is now universally acknowledged that the present generation has to ensure that the coming generations have a world no worse than ours, rather hopefully better.

The generations have been following these fundamental natural laws for thousands of years. However, scenario started changing rapidly during industrial revolution in Europe, and later on they have started growing side by side with awakening of modern society worldwide.

The question is whether we can live in harmony with the environment without warming the planet by sending more greenhouse gases into the atmosphere and without contributing to the current ongoing mass extinction of animals and plants, or not.

The U.S. Environmental Protection Agency defines Sustainable development as: "Sustainable development marries two important themes: that environmental protection does not preclude economic development and that economic development must be ecologically viable now and in the long run." Hence sustainability encompasses ideas and values that inspire people to become custodian of the environment without compromising with the economic growth.

Four fundamental Principle of Sustainable Development agreed by the world community are:

1. *Principle of Intergenerational equity* : need to preserve natural resources for the future generations.
2. *Principle of sustainable use* : use of natural resources in a prudent manner without or with minimum tolerable impact on nature.
3. *Principle of equitable use or intergenerational equity* : Use of natural resources by any state / country must take into account its impact on other states.
4. *Principle of integration* : Environmental aspects and impacts of socio-economic activities should be integrated so that prudent use of natural resources is ensured.

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