

Roll No.....

Time allowed : 3 hours

Maximum marks : 100

Total number of questions : 6

Total number of printed pages : 7

NOTE : 1. Answer **ALL** Questions.

2. All working notes should be shown distinctly.

1. Comment on the following statements :

- (a) During inflation, last-in-first-out (LIFO) method results in more appropriate valuation of closing stock.
- (b) Perpetual inventory is a method of maintaining records, whereas continuous stock taking involves physical checking of those records with actual stock.
- (c) The technique of marginal costing can be a valuable aid to management.
- (d) A cash budget is a plan of the receipts and payments of cash for the budget period, drawn up so that the balance can be forecast at regular intervals.

(5 marks each)

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

2. (a) Distinguish between the following :

- (i) 'Cost allocation' and 'cost apportionment'.
- (ii) 'Joint products' and 'by-products'.

(4 marks each)

- (b) Compute machine hour rate of a machine in a shop consisting of three similar machines occupying equal floor space. Following details are supplied for the machine of which standard working hours per year are fixed at 3,000 hours. Normal idle time is estimated at 25% of the standard time :

	₹
Rent and rates of the shop (<i>per annum</i>)	5,550
General electricity for the shop (<i>per month</i>)	225
Repairs and maintenance expenses for the machine (<i>per annum</i>)	675
Rate of power charges for 100 units (<i>the machine consumes 10 units per hour</i>)	5
Foreman's salary for supervising all the three machines (<i>per month</i>)	1,000
Indirect labour cost for the machine (<i>per hour</i>)	4

The machine costs ₹1,70,000 and scrap value is estimated at ₹12,500 after estimated useful life of 10 years.

The foreman devotes equal attention to all the machines in the shop.

(8 marks)

OR (Alternate question to Q.No. 2)

- 2A. (i) From the following particulars prepare a statement in such form as you consider most suitable for showing clearly all elements of cost :

	₹
Opening stock of raw materials	30,000
Purchase of raw materials	75,000
Raw materials returned to suppliers	3,000
Closing stock of raw materials	20,000
Wages paid to productive workers	18,500
Wages paid to non-productive workers	2,500
Salaries paid to office staff	5,000
Carriage on raw materials purchased	600
Carriage on goods sold	2,000
Fuel, gas, water, etc.	3,500
Repairs to plant	1,000
Depreciation on machinery	1,500
Office expenses	2,600
Direct chargeable expenses	1,200
Advertising	1,600
Abnormal loss of raw material	1,500
Sales	1,40,000

(8 marks)

- (ii) Future Construction Ltd. was awarded with a contract worth ₹10,00,000. Following expenses were incurred by the company for the year ended 31st March, 2012 :

	₹
Plant issued to contract	1,00,000
Material	2,00,000
Wages	2,50,000
Hire charges	50,000
Electricity	1,00,000
Administration overheads	60,000

Of the plant issued to the contract, a part with the original cost of ₹40,000 was sold for ₹50,000 on 1st April, 2011. Plant is subject to depreciation @10% per annum. Material worth ₹20,000 were in stock as on 31st March, 2012.

: 3 :

As on 31st March, 2012, the company received ₹7,20,000 by way of cash being 80% of the work certified. Cost of uncertified work as on 31st March, 2012 was ₹30,000.

The company is expecting to complete the contract by 30th June, 2012, for which the following additional expenditure are expected to be incurred :

	₹
Material (<i>in addition to material in hand</i>)	40,000
Wages	30,000
Administration overheads	5,000
Contingency : 5% of total cost excluding contingency.	

You are required to prepare contract account for the year ended 31st March, 2012.

(8 marks)

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

3. (a) Explain the cost concepts : Opportunity cost, sunk cost, differential cost and conversion cost.
- (b) Activity based costing has been devised to overcome the inadequacies of traditional methods of overhead absorption. Explain.
- (c) Bimal, a worker, has produced 180 units in a week's time. The guaranteed time wages for a forty hour week is ₹72 with an expected output of 140 units. As a part of the incentive scheme, the expected output is further reduced to 120 units per week. Ascertain the earnings per hour of Bimal under Halsey and Rowan bonus schemes.
- (d) Prepare a reconciliation statement from the following figures and ascertain the profits as per financial books :

	₹
Loss as per cost accounts	50,000
Under-valuation of closing stock in cost accounts	25,000
Preliminary expenses written-off in financial books	10,000
Profit on sale of furniture recorded in financial books only	6,000
Interest on bank loan	6,075
Factory overheads over-absorbed	11,075

(4 marks each)

OR (Alternate question to Q.No. 3)

- 3A. (i) Reconciliation of cost and financial books is warranted only in the case of non-integrated accounting. Explain.
- (ii) Write a note on 'escalation clause'.
- (iii) A manufacturer uses 75,000 units of a particular material per year. The material cost is ₹1.50 per unit and the carrying cost is estimated at 25% per annum of average inventory cost. The cost of placing an order is ₹18. You are required to determine the economic order quantity (EOQ), frequency of orders per annum and time between two consecutive orders.
- (iv) A manufacturing company has three production departments and two service departments. Given below are the production overheads incurred in respect of each department :

<i>Production Department</i>		<i>Service Department</i>	
P	₹1,80,000	X	₹2,34,000
Q	₹1,70,000	Y	₹3,00,000
R	₹1,50,000		

Service department overheads are proposed to be charged to production departments on the following basis :

	<i>P</i>	<i>Q</i>	<i>R</i>	<i>X</i>	<i>Y</i>
Service Department X	20%	40%	30%	—	10%
Service Department Y	40%	20%	20%	20%	—

You are required to prepare an overhead distribution summary. Apportion the overheads of the service departments using simultaneous equation method.

(4 marks each)

4. (a) A truck starts with a load of 20 tonnes of goods from station A. It unloads 6 tonnes at station B and rest of the goods at station C. It reaches back directly to station A after getting reloaded with 16 tonnes of goods at station C. The distance from A to B and B to C stations are 100 Kms. and 130 Kms. respectively.

Compute the absolute tonne-kms for the truck service.

: 5 :

- (b) A factory is currently running at 50% capacity and produces 5,000 units at a cost of ₹180 per unit as per the details given below :

	₹
Material	100
Labour	30 (₹12 fixed)
Factory overheads	30 (₹12 fixed)
Administration overheads	20 (₹10 fixed)

The current selling price is ₹200 per unit. At 60% working capacity, material cost per unit increases by 2% and selling price per unit falls by 2%. Estimate the profit of the factory at 60% capacity.

- (c) Sunrise Ltd. sold goods for ₹3,00,000 in a year. In that year, the variable cost was 60% of sales and profit was ₹80,000. Selling price per unit was ₹100.

Find out for the year — (i) P/V ratio; (ii) fixed cost; (iii) break-even sales in rupee terms; and (iv) break-even sales if selling price was reduced by 10% and fixed costs were increased by ₹10,000.

- (d) From the following information of a company, determine — (i) Labour cost variance; (ii) Labour efficiency variance; and (iii) Labour rate variance :

Standard labour cost per unit of production is ₹15. Time allotted per unit is 3 hours. 300 Units are produced in 750 hours during the month of July, 2013. Actual payment of wages for the month is ₹4,500.

(4 marks each)

5. (a) A fertilizer manufacturing company manufactures and markets a chemical fertilizer by blending three raw materials N, P and K. The standard loss permitted for the process is 10%. During the year 2012, the company produced 9,500 units of the fertilizer using a total material of 9,800 Kgs. Standard and actual mix of material was as under :

Material	Standard		Actual	
	Mix(%)	Price/Kg. (₹)	Mix(%)	Price/Kg. (₹)
N	40	30	50	35
P	40	20	30	15
K	20	40	20	45

From the above information, compute — (i) Material cost variance; (ii) Material price variance; (iii) Material usage variance; (iv) Material mix variance; and (v) Material yield variance.

(8 marks)

- (b) In a factory, a product is produced through two distinct processes; Process-A and Process-B. On completion, the product is transferred to finished stock account. During the month of June, 2013, the following information was obtained :

<i>Particulars</i>	<i>Process-A</i>	<i>Process-B</i>
Units introduced	3,000	—
Units transferred to next process	2,800	—
Units transferred to finished stock	—	2,750
Cost of units introduced (₹)	21,000	—
Materials (₹)	—	3,000
Labour cost (₹)	10,600	5,500
Overheads (₹)	3,350	3,820

The normal loss in each process was 5% which was sold at ₹5 per unit. There was no stock of raw material or work-in-progress in the beginning or at the end of the month. You are required to prepare the process accounts and finished stock account.

(8 marks)

6. (a) Calculate the cash flow from operating activities on the basis of the following information using indirect method :

	(₹ in lakhs)
Sales	487.23
Interest earned	58.45
Total income	545.68
Material consumed	246.45
Other expenses	133.18
Loss on sale of asset	33.45
Depreciation	93.34
Interest and finance charges	82.11
Profit before tax	(-) 42.85
Provision for income tax	0.00
Profit after tax	(-) 42.85

: 7 :

Balance sheet extracts as on :

	<i>31st December, 2012</i> (₹ in lakhs)	<i>31st December, 2011</i> (₹ in lakhs)
Inventories	45.30	67.33
Trade receivables	112.65	96.56
Trade payables	94.33	84.78
Provision for tax	4.80	0.00

(4 marks)

- (b) From the given information of a company for the year ended 31st March, 2012, prepare profit and loss account and balance sheet :

Current ratio	2.5 : 1
Quick ratio	1 : 1
Fixed assets to proprietor's funds	0.6
Gross profit ratio	40%
Trade payables turnover	30 times
Trade receivables turnover	20 times
Stock turnover ratio	5 times
Net profit to net worth	1 : 10
Share capital	₹5,00,000
Net working capital	₹2,40,000

Opening stock is ₹10,000 less when compared to closing stock. There were no debentures or long-term loans.

(12 marks)