Roll No. ....49.7754.......

Total No. of Questions – 6

Total No. of Printed Pages – 15

Time Allowed – 3 Hours

Maximum Marks – 100

RBZ

Answer to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

Question No. 1 is compulsory.

Answer any four questions out of the remaining five questions.

Working notes should form part of the answer.

Marks

1. Answer the following : **4×5 =20**

(a) XYZ Ltd uses two types of raw materials-'Material A' and 'Material B' in the production process and has provided the following data for the year ended on 31st March, 2021 :

Particulars	Material A (₹)	Material B (₹)
Opening stock as on 01.04.2020	30,000	32,000
Purchase during the year	90,000	51,000
Closing stock as on 31.03.2021	20,000	14,000

Marks

(i) You are required to calculate :

a) The inventory turnover ratio of 'Material A' and 'Material B'.

b) The number of days for which the average inventory is held for both materials 'A' and 'B'.

(ii) Based on above calculations, give your comments.

(Assume 360 days in a year.)

(b) The Accountant of KPMR Ltd. has prepared the following budget for the coming year 2022 for its two products 'AYE' and 'ZYE' :

Particulars	Product 'AYE'	Product 'ZYE'
Production and Sales (in Units)	4,000	3,000
	Amount (in ₹)	**Amount (in ₹)**
Selling Price per unit	200	180
Direct Material per unit	80	70
Direct Labour per unit	40	35
Variable Overhead per unit	20	25
Fixed Overhead per unit	10	10

After reviewing the above budget, the management has called the marketing team for suggesting some measures for increasing the sales. The marketing team has suggested that by promoting the products on social media, the sales quantity of both the products can be increased by 5%. Also, the selling price per unit will go up by 10%. But this will result in increase in expenditure on variable overhead and fixed overhead by 20% and 5% respectively for both the products.

You are required to prepare flexible budget for both the products :

(i) Before promotion on social media,

(ii) After promotion on social media.

Marks

(c) A skilled worker is paid a guaranteed wage rate of ₹ 150 per hour. The standard time allowed for a job is 10 hours. He took 8 hours to complete the job. He has been paid the wages under Rowan Incentive Plan.

You are required to :

(i) Calculate an effective hourly rate of earnings under Rowan Incentive Plan.

(ii) Calculate the time in which he should complete the job, if the worker is placed under Halsey Incentive Scheme (50%) and he wants to maintain the same effective hourly rate of earnings.

(d) A product passes through Process-I and Process-II.

Particulars pertaining to the Process-I are :

Materials issued to Process-I amounted to ₹ 80,000, Wages ₹ 60,000 and manufacturing overheads were ₹ 52,500. Normal Loss anticipated was 5% of input. 9,650 units of output were produced and transferred out from Process-I to Process II. Input raw materials issued to Process I were 10,000 units.

There were no opening stocks.

Scrap has realisable value of ₹ 5 per unit.

You are required to prepare :

(i) Process-I Account

(ii) Abnormal Gain/Loss Account

Marks

2. (a) G Ltd. manufactures leather bags for office and school purposes. 10

The following information is related with the production of leather bags for the month of September 2021.

1) Leather sheets and cotton clothes are the main inputs and the estimated requirement per bag is two metres of leather sheets and one metre of cotton cloth. 2,000 metre of leather sheets and 1,000 metre of cotton cloths are purchased at ₹ 3,20,000 and ₹ 15,000 respectively. Freight paid on purchases is ₹ 8,500.

2) Stitching and finishing need 2,000-man hours at ₹ 80 per hour.

3) Other direct costs of ₹ 10 per labour hour is incurred.

4) G Ltd have 4 machines at a total cost of ₹ 22,00,000. Machines have a life of 10 years with a scrap value of 10% of the original cost. Depreciation is charged on a straight-line method.

5) The monthly cost of administration and sales office staffs are ₹ 45,000 and ₹ 72,000 respectively. G Ltd pays ₹ 1,20,000 per month as rent for a 2,400 sq. feet factory premises. The administrative and sales office occupies 240 sq. feet and 200 sq. feet respectively of factory space.

6) Freight paid on delivery of finished bags is ₹ 18,000.

7) During the month, 35 kgs of scrap (cuttings of leather and cotton) are sold at ₹ 150 per kg.

8) There are no opening and closing stocks of input materials. There is a finished stock of 100 bags in stock at the end of the month.

Marks

You are required to prepare a cost sheet in respect of above for the month of September 2021 showing :

i) Cost of Raw Material Consumed

ii) Prime Cost

iii) Works/Factory Cost

iv) Cost of Production

v) Cost of Goods Sold

vi) Cost of Sales

(b) AZ company has prepared its budget for the production of 2,00,000 units. The variable cost per unit is ₹ 16 and fixed cost is ₹ 4 per unit. The company fixes its selling price to fetch a profit of 20% on total cost. **10**

You are required to calculate :

i) Present break-even sales (in Rs and in quantity).

ii) Present profit-volume ratio.

iii) Revised break-even sales in Rs and the revised profit-volume ratio, if it reduces its selling price by 10%.

iv) What would be revised sales -in quantity and the amount, if a company desires a profit increase of 20% more than the budgeted profit and selling price is reduced by 10% as above in point (iii).

Marks

3. (a) Paras Travels provides mini buses to an IT company for carrying its employees from home to office and dropping back after office hours. It runs a fleet of 8 mini buses for this purpose. The buses are parked in a garage adjoining the company's premises. Company is operating in two shifts (one shift in the morning and one shift in the afternoon). The distance travelled by each mini bus one way is 30 kms. The company works for 20 days in a month. **10**

The seating capacity of each mini bus is 30 persons. The seating capacity is normally 80% occupied during the year. The details of expenses incurred for a year are as under :

Particulars	
Driver's salary	₹ 20,000 per driver per month
Lady attendant's salary (mandatorily required for each mini bus)	₹ 10,000 per attendant per month
Cleaner's salary (One cleaner for 2 mini buses)	₹ 15,000 per cleaner per month
Diesel (Avg. 8 kms per litre)	₹ 80 per litre
Insurance charges (per annum)	2% of Purchase Price
License fees and taxes	₹ 5,080 per mini bus per month
Garage rent paid	₹ 24,000 per month

Marks

Repair & maintenance including engine oil and lubricants (for every 5,760 kms)	₹ 2,856 per mini bus
Purchase Price of mini bus	₹ 15,00,000 each
Residual life of mini bus	8 Years
Scrap value per mini bus at the end of residual life	₹ 3,00,000

Paras Travels charges two types of fare from the employees. Employees coming from a distance of beyond 15 kms away from the office are charged double the fare which is charged from employees coming from a distance of up-to 15 kms. away from the office. 50% of employees travelling in each trip are coming from a distance beyond 15 kms. from the office. The charges are to be based on average cost.

You are required to :

i) Prepare a statement showing expenses of operating a single mini bus for a year,

ii) Calculate the average cost per employee per month in respect of :

a) Employees coming from a distance upto 15 kms. from the office.

b) Employees coming from a distance beyond 15 kms. from the office.

P.T.O.

Marks

(b) A Drug store is presently selling three types of drugs namely 'Drug A', 'Drug B' and 'Drug C'. Due to some constraints, it has decided to go for only one product line of drugs. It has provided the following data for the year 2020-21 for each product line : 10

	Drugs Types		
	A	B	C
Revenues (in ₹)	74,50,000	1,11,75,000	1,86,25,000
Cost of goods sold (in ₹)	41,44,500	68,16,750	1,20,63,750
Number of purchase orders placed (in nos)	560	810	630
Number of deliveries received	950	1,000	850
Hours of shelf-stocking time	900	1,250	2,350
Units sold (in Nos)	1,75,200	1,50,300	1,44,500

Following additional information is also provided :

Activity	Description of activity	Total Cost (₹)	Cost-allocation base
Drug Licence fee	Drug Licence fee	5,00,000	To be distributed in ratio 2:3:5 between A, B and C

Marks

Ordering	Placing of orders for purchases	8,30,000	2,000 purchase orders
Delivery	Physical delivery and receipt of goods	18,20,000	2,800 deliveries
Shelf stocking	Stocking of goods	32,40,000	4,500 hours of shelf-stocking time
Customer Support	Assistance provided to customers	28,20,000	4,70,000 units sold

You are required to :

(i) Calculate the operating income and operating income as a percentage (%) of revenue of each product line if :

a) All the support costs (Other than cost of goods sold) are allocated in the ratio of cost of goods sold.

b) All the support costs (Other than cost of goods sold) are allocated using activity-based costing system.

(ii) Give your opinion about choosing the product line on the basis of operating income as a percentage (%) of revenue of each product line under both the situations as above.

Marks

4. (a) A construction company has obtained a contract of ₹ 30 lakhs contract price. 10

The following details are available in respect of this contract for the year ended March 31,2021 :

Particulars	(₹)
Materials purchased	2,00,000
Materials issued from stores	8,00,000
Wages paid	1,50,000
Plant Supervisor Salary	2,40,000
Drawing and maps	50,000
Sundry expenses	30,000
Electricity charges	40,000
Plant hire expenses paid	75,000
Sub-contract cost	40,000
Materials returned to stores	35,000
Materials returned to suppliers	50,000

The following balances related to the contract for the year ended on March 31, 2020 and March 31, 2021 are available :

Marks

	As on 31st March, 2020 (₹)	As on 31st March, 2021 (₹)
Work certified	2,50,000	70% of Contract Price
Work uncertified	10,000	?
Materials at site	35,000	25,000
Wages outstanding	15,000	22,000
Plant hire charges outstanding	20,000	15,000

Further informations are as under :

1. An additional plant was used for 270 days costing ₹ 5,00,000 with a residual value of ₹ 20,000 having life of 4 years.

2. During the year, material costing ₹ 40,000 was sold for ₹ 20,000.

3. Plant supervisor has devoted 1/3rd of his time to this contract.

4. As on 31-03-2021, 80% of the contract was completed.

You are required to prepare Contract Account and show the notional profit or loss as on 31st March, 2021. **(Assume 360 days in a year.)**

Marks

(b) R Ltd. showed a Net Profit of ₹ 3,60,740 as per their cost accounts for the year ended 31st March, 2021. 5

The following information was revealed as a result of scrutiny of the figures from the both sets of accounts :

Sr. No.	Particulars	(₹)
i.	Over recovery of selling overheads in cost accounts	10,250
ii.	Over valuation of closing stock in cost accounts	7,300
iii.	Rent received credited in financial accounts	5,450
iv.	Bad debts provided in financial accounts	3,250
v.	Income tax provided in financial accounts	15,900
vi.	Loss on sale of capital asset debited in financial accounts	5,800
vii.	Under recovery of administration overheads in cost accounts	3,600

Required :

Prepare a reconciliation statement showing the profit as per financial records.

Marks

(c) What is Bill of Material ? Describe the uses of Bill of Material in following departments : 5

(i) Purchases Department

(ii) Production Department

(iii) Stores Department

(iv) Cost / Accounting Department

5. (a) In a manufacturing company the standard units of production for the year were fixed at 1,20,000 units and overhead expenditures were estimated to be as follows : 10

Particulars	Amount (₹)
Fixed	12,00,000
Semi-variable (60% expenses are of fixed nature and 40% are of variable nature)	1,80,000
Variable	6,00,000

Actual production during the month of April, 2021 was 8,000 units. Each month has 20 working days. During the month there was one public holiday. The actual overheads were as follows :

Particulars	Amount (₹)
Fixed	1,10,000
Semi-variable (60% expenses are of fixed nature and 40% are of variable)	19,200
Variable	48,000

P.T.O.

Marks

You are required to calculate the following variances for the month of April 2021 :

i. Overhead Cost variance

ii. Fixed Overhead Cost variance

iii. Variable Overhead Cost variance

iv. Fixed Overhead Volume variance

v. Fixed Overhead Expenditure Variance

vi. Calendar Variance

(b) XYZ Ltd. manufactures a single product. It recovers factory overheads at a pre-determined rate of ₹ 20 per man-day. **10**

During the year 2020-21, the total factory overheads incurred and the man-days actually worked were ₹ 35.50 lakhs and 1.50 lakh days respectively. Out of the amount of ₹ 35.50 lakhs, ₹ 2.00 lakhs were in respect of wages for strike period and ₹ 1.00 lakh was in respect of expenses of previous year booked in this current year. During the period, 50,000 units were sold. At the end of the period, 12,000 completed units were held in stock but there was no opening stock of finished goods. Similarly, there was no stock of uncompleted units at the beginning of the period but at the end of the period there were 20,000 uncompleted units which may be treated as 65% complete in all respects.

Marks

On investigation, it was found that 40% of the unabsorbed overheads were due to factory inefficiency and the rest were attributable to increase in the cost of indirect materials and indirect labour. You are required to :

(i) Calculate the amount of unabsorbed overheads during the year 2020-21.

(ii) Show the accounting treatment of unabsorbed overheads in cost accounts and pass journal entry.

6. Answer any four of the following : 4×5 =20

(a) Briefly explain the 'techniques of costing'.

(b) Narrate the terms 'Joint Products' and 'By-Products' with an example of each term.

(c) Discuss the steps involved in setting labour time standards.

(d) What is 'Budgetary Control System' and discuss the components of the same.

(e) Describe the difference between 'Cost Control' and 'Cost Reduction'.