



Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

**SECTION – A (Compulsory)****1. Choose the correct option: [15 x 2 = 30]**

- (i) Which of the following is not a characteristic of management accounting?
- (a) Forward-looking
  - (b) Historical orientation
  - (c) Internal focus
  - (d) Decision-making
- (ii) The break-even point is where:
- (a) Total costs equal total revenue
  - (b) Total revenue exceeds total costs
  - (c) Variable costs equal fixed costs
  - (d) Contribution margin is negative
- (iii) Variance analysis is used to:
- (a) Identify the root causes of inefficiencies
  - (b) Calculate contribution margin
  - (c) Prepare financial statements
  - (d) Determine break-even point
- (iv) Which of the following is not a relevant cost information in a make or buy decision in short-run (i.e., in marginal costing)?
- (a) Variable cost of making
  - (b) General fixed cost
  - (c) Purchase price
  - (d) Loss of contribution to make the product
- (v) If Sales – ₹ 9,00,000; Margin of safety = 40%; P/V Ratio = 2/3, then what is the Break-even Sales?
- (a) ₹ 4,50,000
  - (b) ₹ 3,60,000
  - (c) ₹ 5,40,000
  - (d) ₹ 6,00,000

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- (vi) Sale for two consecutive months, of a company are ₹ 3,80,000 and ₹ 4,20,000. The company's net profits for these months amounted to ₹ 24,000 and ₹ 40,000 respectively. There is no change in contribution/sales ratio or fixed costs. The contribution/sales ratio of the company is \_\_\_\_\_.
- (a)  $\frac{1}{3}$   
(b)  $\frac{2}{5}$   
(c)  $\frac{1}{4}$   
(d)  $\frac{3}{8}$
- (vii) Standard Cost is a \_\_\_\_\_ cost.
- (a) Pre-determined  
(b) Actual  
(c) Historical  
(d) Short-term
- (viii) Which of the following budgets should be prepared first?
- (a) Production Budget  
(b) Purchases Budget  
(c) Master Budget  
(d) Sales Budget
- (ix) Labour Turnover is equal to:
- (a) The number of people working in the current period  
(b) The number of people who left the organisation in the previous period  
(c) Rate of change of labour force  
(d) The rate of the change in the wages of the labour force
- (x) The per unit expenses of the \_\_\_\_\_ portion varies with the volume of production while \_\_\_\_\_ portion remains the same with volume.
- (a) Fixed; Variable  
(b) Variable; Fixed  
(c) Variable; Semi-Variable  
(d) Fixed; Semi-Variable
- (xi) Which method of costing is commonly used by companies that produce unique products or services?
- (a) Process costing  
(b) Job costing  
(c) Batch costing  
(d) Both A and C

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- (xii) Material price variance is calculated by \_\_\_\_\_.  
(a)  $\text{Standard Price} \times \text{Actual Quantity} - \text{Actual Price} \times \text{Actual Quantity}$   
(b)  $\text{Standard Price} \times \text{Actual Quantity} - \text{Actual price} \times \text{Standard Quantity}$   
(c)  $\text{Actual Price} \times \text{Actual Quantity} - \text{Standard price} \times \text{Standard Quantity}$   
(d)  $\text{Actual price} \times \text{Standard Quantity} - \text{Standard price} \times \text{Standard Quantity}$
- (xiii) Calculate the material price variance from the following:  
Actual Quantity - 2.5 kgs  
Standard Price - ₹ 3 per kg  
Actual Price - ₹ 5 per kg  
Standard Quantity - 4.5 kgs  
(a) ₹ 3 (F)  
(b) ₹ 5 (A)  
(c) ₹ 12 (A)  
(d) ₹ 6 (F)
- (xiv) Which budgeting technique involves preparing budgets from the bottom of the organization hierarchy to the top?  
(a) Top-down budgeting  
(b) Zero-based budgeting  
(c) Incremental budgeting  
(d) Bottom-up budgeting
- (xv) A manufacturing company budgets to produce 10,000 units during a period. It expects to incur ₹ 50,000 in fixed overhead costs and ₹ 3 per unit in variable overhead costs. If the actual production turns out to be 9,500 units, what is the company's flexible budget overhead cost?  
(a) ₹ 94,500  
(b) ₹ 95,000  
(c) ₹ 96,500  
(d) ₹ 97,000

**SECTION-B**

**(Answer any 5 questions out of 7 questions given. Each question carries 14 marks.)**

**[5x14=70]**

2. (a) Globalisation brought about significant changes in the business environment. Along with the changes the roles of the management accountant had to be redefined. In the following lines, discuss some of the impacts of the new business environment on management accounting. [7]



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- (b) ABC & Associates provides consulting and tax preparation services to its clients. It charges a ₹100 fee per hour for each service. The firm's revenues and costs for the month March 2024 are shown in the following income statement:

Particulars	Tax Preparation	Tax Consulting	Total
Revenue - Amount (₹)	1,30,000	2,70,000	4,00,000
Expenses:			
Secretarial support			80,000
Supplies			72,000
Computer costs, etc.			40,000
Profit			1,92,000

The firm uses ABC and the following are the cost drivers:

Overhead Cost	Cost Driver	Tax Preparation	Tax Consulting
Secretarial support	Number of clients	72	48
Supplies	Transactions with clients	200	300
Computer costs	Computer hours	1,000	600

Required:

- Prepare the income statement using activity-based costing and the firm's three cost drivers.
- Calculate the income statement using direct-labour hours as the only allocation base: 1,300 hours for tax preparation; 2,700 hours for tax consulting.
- Demonstrate how might the firm's decisions be altered if it were to allocate all overhead costs using direct labour hours?
- Demonstrate under what circumstances would the about-based allocation and activity-based costing (using the three cost drivers) result in similar profit results?

[7]

3. A author company is a multidivisional company and its managers have been delegated full profit responsibility and autonomy to accept or reject transfers from other divisions. Division X produces a sub-assembly with a ready competitive market. This sub-assembly is currently used by Division Y for a final product that is sold outside at ₹1,200. Division X Charges Division Y market price for the sub-assembly which is ₹700 per unit. Variable costs are ₹520 and ₹600 for Divisions X and Y respectively.

The manager of Division Y feels that Division X should transfer the subassembly, at a lower price than market because at this price, Division Y is unable to make a profit.

Required:

- (A) Calculate Division Y's profit contribution if transfers are made at the market price and



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also the total contribution to profit for the company.

- (B) Assume that Division A can sell all its production in the open market. Determine should Division X transfer goods to Division Y? If so, at what price?
- (C) Assume that Division X can sell in the open market only 500 units at ₹700 per unit out of 1,000 units that it can produce every month and that a 20 per cent reduction in price is necessary to sell at full capacity. Determine should transfers be made. If so, how many units should it transfer and at what price? prepare a schedule showing comparisons of contribution margins under three different alternatives to support your decision. [14]

4. (a) Company XYZ manufactures and sells a single product. Here are the details for the current period:  
Selling Price per Unit: ₹50  
Variable Cost per Unit: ₹30  
profit: ₹20,000  
Current Sales Volume: 5,000 units  
Calculate the following:  
(i) Fixed cost  
(ii) P/v ratio  
(iii) Break-Even Point in Units  
(iv) Margin of safety  
(v) Number of Units Needed to Achieve a Desired Profit of ₹40,000. [7]

- (b) A Co. currently operating at 80% capacity has the following profitability particulars:

Particulars	Amount ₹
Sales	16,00,000
Costs:	
Direct Materials	5,80,000
Direct labour	2,40,000
Variable Overheads	60,000
Fixed Overheads	5,20,000
Profit	2,00,000

An export order has been received that would utilise 40% of the capacity of the factory. The order has either to be taken in full and executed at 10% below the normal domestic prices, or rejected totally. The alternatives available to the management are given below:

- A. Reject order and Continue with the domestic sales only, as at present;  
B. Accept the order, and turn away excess domestic demand;  
C. Increase capacity so as to accept the export order and maintain the present domestic sales by:



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- (i) buying an equipment that will increase capacity by 10% and fixed cost by ₹65,000 and
- (ii) Work overtime at one and a half the normal rate to meet balance of required capacity.

Prepare a statement showing profits from different alternatives and suggest the best.

[7]

5. The budgeted output of a manufacturing company for 2023-24 was 5,000 units. The financial results in respect of actual output of 4,800 units achieved during the year were as under:

	₹		₹
Direct Material	29,700	Fixed Overheads	39,000
Direct Wages	44,700	Profit	36,600
Variable Overheads	72,750	Sales	2,22,750

The standard direct wages rate is ₹4.50 per hour and the standard variable overhead rate is ₹7.50 per hour.

The cost accounts recorded the following variances for the year:

Variances	Favourable (₹)	Adverse (₹)
Material Price	-	300
Material Usage	-	600
Wage rate	750	-
Labour efficiency	-	2,250
Variable overhead expense	3,000	-
Variable overhead efficiency	-	3,750
Fixed overhead expense	-	1,500
Selling price	6,750	-

You are required to:

- (i) Prepare a statement showing the original budget and the standard product cost sheet per unit.
- (ii) Prepare a statement showing the reconciliation of originally budgeted profit and actual profit.

[14]

6. (a) Following information is given regarding standard composition and standard rates of a gang workers:

Standard composition	Standard hourly rate
100 Men	₹0.625
50 Women	₹0.400
50 Boys	₹0.350

According to given specifications, a week consists of 40 hours and standard output for a week is 1,000 units.

In a particular week, gang consisted of 130 men, 40 women and 30 boys and actual wages were paid as follows:

Men @ ₹0.6 per hour

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Women @ ₹0.425

Boys @ ₹0.325 per hour

Two hours were lost in the week due to abnormal sale time. Actual production was 960 units in the week.

Calculate the following-

- (i) Labour rate variance,
- (ii) Labour mix variance,
- (iii) Labour idle time variance,
- (iv) Labour yield variance,
- (v) Labour efficiency variance,
- (vi) Labour cost variance.

**[7]**

- (b) Prepare a Cash Budget for the three months ending 30th June, 2024 from the information given below:

(i)

Month	Sales (₹)	Materials (₹)	Wages (₹)	Overheads (₹)
February	14,000	9,600	3,000	1,700
March	15,000	9,000	3,000	1,900
April	16,000	9,200	3,200	2,000
May	17,000	10,000	3,600	2,200
June	18,000	10,400	4,000	2,300

(ii) Credit terms are:

Sales/debtors: 10% sales are on cash, 50% of the credit sales are collected next month and the balance in the following month.

Creditors: Materials 2 months

Wages 1/4 in the following month

Overheads 1/2 in the following month

(iii) Cash and bank balance on 1st April, 2024 is expected to be ₹ 6,000.

(iv) Other relevant information are:

- Plant and machinery will be installed in February 2024 at a cost of ₹96,000. The monthly instalment of ₹2,000 is payable from April onwards.
- Dividend @ 5% on preference share capital of ₹2,00,000 will be paid on 1st June.
- Advance to be received for sale of vehicles ₹9,000 in June.
- Dividends from investments amounting to ₹1,000 are expected to be received in June.

**[7]**

**INTERMEDIATE EXAMINATION****SET 1****MODEL QUESTION PAPER****TERM – DECEMBER 2024****PAPER – 12****SYLLABUS-2022****MANAGEMENT ACCOUNTING**

7. (a) The following information is supplied by ABC Ltd. for the year 31-03-2024:

Sl. No.	Particulars	(₹ In Crores)	(₹ In Crores)
(i)	Profit after tax (PAT)		275.90
(ii)	Interest		4.95
(iii)	Equity Share Capital	40.00	
	Accumulated Surplus	750.00	
	Shareholders fund	790.00	
	Loans (Long term)	40.00	
	Total long term funds		830.00
(iv)	Market Capitalization		2900.00
Additional information:			
(a)	Risk free rate		12.00
(b)	Long Term Market Rate (Based on BSE Sensex)		15.50 %
(c)	Effective tax rate for the company		30 %
(d)	Beta ( $\beta$ ) for last few years		
	Year		
	1	0.48	
	2	0.52	
	3	0.60	
	4	1.10	
	5	0.99	

You are required to calculate the Economic Value Added of ABC Ltd. as on 31st March, 2024. [7]

- (b) C has designed a new type of sailing boat, for which the cost and sales price of the first boat to be produced has been estimated as follows:

	₹
Materials	5,000
Labour (800 hrs. @ ₹5 per hr.)	4,000
Overhead (150% of labour cost)	6,000
	15,000
Profit mark-up (20%)	3,000
Sales price	18,000

It is planned to sell all the yachts at full cost plus 20%. An 80% learning curve is expected to apply to the production work. Only one customer has expressed interest in buying the yacht so far, but he thinks ₹18,000 is too high a price to pay. He might want to buy two or even four of the yachts over the next six months.

He has asked the following questions:

1. If he paid ₹18,000 for the first yacht, what price would he have to pay later for a second yacht?



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2. Could C quote the same unit price for two yachts, if the customer ordered two at the same time?
3. If the customer bought two yachts now at one price, what would be the price per unit for a third and fourth yacht, if he ordered them both together later on?
4. Could C quote a single unit price for the following numbers of yachts if they were all ordered now?
  - Four yachts
  - Eight yachts

Assuming there are no other prospective customers for the yacht, calculate the price for different yachts and describe how would the questions be answered? [7]

8. (a) LTB Ltd. has a new wonder product, the V, of which it expects great things. At the moment the company has two courses of action open to it, to test market the product or abandon it.

If the company test markets it, the cost will be ₹ 1,00,000 and the market response could be positive or negative with probabilities of 0.60 and 0.40.

If the response is positive the company could either abandon the product or market it full scale.

If it markets the V in full scale, the outcome might be low, medium or high demand, and the respective net gains/(losses) would be (200), 200 or 1,000 in units of ₹1,000 (the result could range from a net loss of ₹ 2,00,000 to a gain of ₹10,00,000). These outcomes have probabilities of 0.20, 0.50 and 0.30 respectively.

If the result of the test marketing is negative and the company goes ahead and markets the product, estimated losses would be ₹ 6,00,000.

If, at any point, the company abandons the product, there would be a net gain of ₹ 50,000 from the sale of scrap. All the financial values have been discounted to the present.

Required:

Prepare a decision tree and include figures for cost, loss or profit on the appropriate branches of the tree. [7]

- (b) Describe responsibility centres and explain its different types. [7]