INTERMEDIATE EXAMINATION **SET 2**

MODEL QUESTION PAPER **TERM – DECEMBER 2025**

PAPER – 12 **SYLLABUS 2022**

MANAGEMENT ACCOUNTING

Time Allowed: 1 Hour **Full Marks: 100**

Answer all questions. Each question carries 2 marks.

SECTION – A (Compulsory)

I. Choose the correct option: **[15 x 2 =30]**

i. The primary objective of Management Accounting is to _____.
(a) maximize profits
(b) minimize losses
(c) maximize profits or minimize losses
(d) All of the above

ii. The purpose of management accounting is to help _____make decisions.
(a) Managers
(b) Investors
(c) Marketers
(d) Banks

iii. In an ABC system, which of the following is likely to be classified as a batch level activity?
(a) Machine set-up
(b) Product design
(c) Inspection of every item produced
(d) Production manager's work

iv. Process of Cost allocation under Activity Based Costing is:
(a) Cost of Activities—Activities —Cost Driver – Cost allocated to cost objects
(b) Cost Driver — Cost of Activities— Cost allocated to cost objects – Activities
(c) Activities— Cost of Activities—Cost Driver – Cost allocated to cost objects
(d) Activities—Cost Driver – Cost allocated to cost objects — Cost of Activities

v. Determine sales in units for desired profit if Fixed cost is ₹15,000, desired profit is ₹5,000 Selling price per unit is ₹20 and Variable cost per unit is ₹16.
(a) ₹5,000 units
(b) ₹ 5,000 units
(c) ₹ 10,000 units
(d) ₹10,000 units

vi. Determine B.E.P. if sales is ₹1,00,000, variable cost is ₹50,000 and profit ₹20,000:
(a) ₹60,000
(b) ₹40,000
(c) ₹80,000
(d) None of the above

vii. Fixed cost includes:
(a) Property taxes
(b) Rent
(c) Insurance premium
(d) All of the above

viii. M Group has two divisions; Division P and Division Q. Division P manufactures an item that is transferred to Division Q. The item has no external market and 6,000 units produced are transferred internally each year. The costs of each division are as follows?

	Division P	Division Q
Variable Cost	₹100 per unit	₹120 per unit
Fixed cost each year	₹1,20,000	₹90,000

Head Office management decided that a transfer price should be set that provides a profit of ₹30,000 to Division P. What should be the transfer price per unit?
(a) ₹ 145
(b) ₹ 125
(c) ₹ 120
(d) ₹ 135

ix. The advantages of standard costs include all of the following except:
(a) Management by exception may be used
(b) Management planning is facilitated
(c) They may simplify the costing of inventories
(d) Management must use a static budget

x. Which of the following equations can be used to calculate a material quantity variance?
(a) (AQ × AP) - (AQ × SP)
(b) (AP × SP) - (AQ × SP)
(c) (AQ × SP) - (SQ × SP)
(d) (AQ × SP) - (AQ × AP)

xi. The process of budgeting helps in the control of:
(a) Cost of production
(b) Liquidity
(c) Capital Expenditure
(d) All of the above

xii. Return on Equity =
(a) Net Profit Margin × Asset Turnover Ratio × Financial Leverage
(b) Gross Profit Margin × Asset Turnover Ratio × Financial Leverage
(c) Net Profit Margin × Inventory Turnover Ratio × Financial Leverage
(d) Net Profit Margin × Asset Turnover Ratio × Operating Leverage

xiii. Responsibility accounting is used for _____.
(a) cost control
(b) planning
(c) decision making
(d) pricing

xiv. A type of decision -making environment is
(a) Certainty
(b) Uncertainty
(c) Risk
(d) All of these

xv. The minimum expected opportunity loss (EOL) is:
(a) Equal to EVPI
(b) Minimum regret
(c) Equal to EMV
(d) Both (a) and (b)

Section – B

(Answer any five questions out of seven questions given. Each question carries 14 Marks)

[5 x 14 = 70]

2. (a) Discuss the difference between Cost Accounting and Management Accounting. **[7]**

(b) XYZ Co. Produces three products X,Y & Z ,their per unit cost data are given below:

Particulars	X	Y	Z	Total
Unit Produced	10,000	20,000	30,000	
Direct Material cost per unit (₹)	50	40	30	
Direct Labour Cost Per unit (₹)	30	40	50	
Labour Hour Per Unit	3	4	5	
Machine Hour Per Unit	4	4	7	
No. Of Purchase Requisition	1200	1800	2000	5000
Number Of Machine Set ups	240	260	300	800

Production overhead ₹26,00,000 split into two departments:
Department 1: 11,00,000,

Department 2: 15,00,000,
Department 1 is labour intensive and Department 2 is machine intensive.
Total labour hours in Department 1 = 1,83,333
Total machine hours in department 2 = 5,00,000.
Production overheads split into two ₹26,00,000.
Receiving and inspection: 14,00,000, Production scheduling and machine set up: 12,00,000.
You are required to prepare product cost statement under Traditional method and Activity method.

[7]

3. (a) Carbon Ltd. Manufactures 50,000 units of a product with the following cost break up:

	(₹)
Direct material cost	5.00
Direct wages	3.00
Direct expenses	1.50
Other variable costs	2.50
Fixed costs	4.00
Total cost	16.00

The product with the same specification is available in the market at a price of ₹14.

I. Examine whether you would decide to buy the component at this price.
II. Calculate and evaluate your decision if the supplier offers to sell the product at a price of (i) ₹11 and (ii) ₹12.

[7]

(b) A company has two profit centres; X and Y. X sells half of its output on the open market and transfers the other half to Y. Costs and external revenues in an accounting period are as follows.

	X	Y	Total
	₹	₹	₹
External sales	8,000	24,000	32,000
Costs of production	12,000	10,000	22,000
Company profits			10,000

Required:
Examine the implications of setting the transfer price at market value between profit centres X and Y.

[7]

4. **(a)** A retailer dealer in garments is currently selling 24,000 shirts annually. He supplies the following details for the year ended 31 December, 2024:

	₹
Selling price per unit	40
Variable cost per unit	25

Fixed cost: Staff salaries for the year	1,20,000
General office costs for the year	80,000
Advertising costs for the year	40,000

As a cost accountant of the firm, you are required to calculate the following each part independently:

i. Calculate the break-even point and margin of safety in sales revenue.
ii. Assume that 20,000 shirts were sold in a year. Calculate the net profit of the firm.
iii. If it is decided to introduce selling commission of ₹3 per shirt, how many shirts would require to be sold in a year to earn a net income of ₹15,000.
iv. Calculate the break-even point (in units and sales revenue) if, for the year 2025, an additional staff salary of ₹34,000 is anticipated and the selling price per shirt increases by 15%.

[7]

(b) A producer installed a machine which can produce product 'A' as well as product 'B'. Annual maximum machine running capacity is 4,000 hours. Cost details of the products are as follows:

	Product 'A'	Product 'B'
Selling price per unit	₹ 50	₹ 20
Variable cost per unit	₹ 30	₹12
Machine hours required per unit of product	10 hrs.	2 Hrs.
Annual demand	300 Units	1,600

Units Annual Fixed Cost: ₹10,000

Calculate optimum product-mix showing annual contribution and profit along with necessary explanations. Further, analyze how adopting a product-mix different from the one you have suggested would affect the overall profitability of the firm. **[7]**

5. (a) KMLKO Ltd. has disclosed the following data for the month of January:

	Budget	Actual
Outputs (units)	30,000	32,500
Hours	30,000	33,000
Variable overhead	60,000	70,000
Working days	25	26

Calculate overhead variances. **[7]**

(b) ABC Co. uses a standard cost system and manufactures product Z. Standard cost per 1000 kg of output is as under:

In March 2024, the company produced 2,00,000 kg of output. Actual consumption was:

Material	Quantity (in kg)	Price (in ₹)
A	800	2.50
B	200	4.00
C	200	1.00

Material:
A – 1,57,000 kg @ ₹ 2.40
B – 38,000 kg @ ₹ 4.20
C – 36,000 kg @ ₹ 1.10
Calculate Material cost variance.

6. (a) PC Ltd. is preparing its budget for the second quarter of 2024-25 for its popular product, 'X'. The following information has been provided to assist in the budget preparation:

(i) The company anticipates selling 150,000 bags of 'X' during the second quarter of 2024-25, with a selling price of ₹1,200 per bag.

(ii) Each bag of 'X' requires 2.5 meters of raw material 'Y' and 7.5 meters of raw material 'Z'.

(iii) Planned stock levels for raw materials and finished goods are outlined as follows:

Particulars	Beginning of Quarter	End of Quarter
Finished Bags of 'X' (Nos.)	45,000	33,000
Raw - Material 'Y' (mtr)	96,000	78,000
Raw - Material 'Z' (mtr)	1,71,000	1,41,000
Empty Bag (Nos.)	1,11,000	84,000

(i) 'Y' cost ₹160 per mtr., 'Z' costs ₹30 per mtr. and 'Empty Bag' costs ₹120 each.

(ii) It requires 9 minutes of direct labour to produce and fill one bag of 'X'. Labour cost is ₹70 per hour.

(iii) Variable manufacturing costs are ₹60 per bag. Fixed manufacturing costs ₹40,00,000 per quarter.

(iv) Variable selling and administration expenses are 5% of sales and fixed administration and selling expenses are ₹3,75,000 per quarter.

Required

I. Prepare a production budget in terms of quantity for the second quarter of 2024-25.

II. Prepare a raw material purchase budget for raw materials 'Y', 'Z', and 'Empty Bags' for the second quarter of 2024-25, both in terms of quantity and value.

III. Calculate the budgeted variable cost per unit for producing one bag of product 'X' for the second quarter of 2024-25.

[7]

(b) Budget for the previous two years are as provided below - (in ₹ Lakhs)

Particulars	Year 1 (for 5,000 units)		Year 2 (for 6,000 units)	
Sales		30.00		39.60
Materials	12.50		15.75	
Labour	6.00		7.92	
Overheads (Variable and Fixed)	7.00	25.50	8.70	32.37

Profit		4.50		7.23

- The price increase in Year 2 was driven by inflation, which also impacted the overhead costs.
- The management believes that the increase in sales volume and labour costs in Year 3 will be consistent with the growth experienced in Year 2 compared to Year 1.
- Regarding the increase in sales price and other cost components, two perspectives are being considered: (i) same increase rate will prevail, and (ii) increase will be less by 2%.

Prepare the Budgeted Profitability for Year 3, taking both views (i) and (ii) above. **[7]**

7. **(a)** XYZ LTD furnishes the following information, from which you are required to calculate the Economic Value Added of the company:

Equity shares of ₹1,000 each Nos.	1,58,200
12% Debentures of ₹10 each Nos.	50,00,000
Tax rate	30%
Financial Leverage	1.1 times
Securities Premium Account (₹ in lakhs)	155
Free reserves (₹ in lakhs)	154
Capital Reserve (₹ in lakhs)	109

It is a prevailing practice for companies in the industry to which XYZ belongs to pay at least a dividend of 15% p.a. to its Equity shareholders. **[7]**

(b) The usual learning curve model is $y = ax^b$ where, 'y' is the average time per unit for x units; 'a' is the time for first unit; x is the cumulative number of units; b is the learning coefficient and is equal to log 0.8 ÷ log 2 = – 0.322 for a learning rate of 80%. Given that a = 10 hours and learning rate 80%, you are required to calculate:

(i) The average time for 20 units.

(ii) The total time for 30 units.

(iii) The time for units 31 to 40.

Given that log 2 = 0.301, Antilog of 0.5811 = 3.812; log 3 = 0.4771, Antilog of 0.5244 = 3.345, log 4 = 0.6021, Antilog of 0.4841 = 3.049. **[7]**

8. **(a)** Explain the concept of a Decision Tree as a tool of managerial decision-making. Also summarize its merits in analysing sequential decisions and expected outcomes. **[7]**

(b) Explain the essential features of Responsibility Accounting. **[7]**