INTERMEDIATE EXAMINATION — SET - 2
MODEL QUESTION PAPER — TERM – DECEMBER 2024
PAPER – 12 — SYLLABUS 2022
MANAGEMENT ACCOUNTING

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) In the context of budgeting, what is a 'flexible budget'?
a) A budget that remains unchanged regardless of actual performance
b) A budget that adjusts to changes in activity levels
c) A budget that is created after the actual results are known
d) A budget that includes only fixed costs.

(ii) Which of the following methods is used to allocate overhead costs based on the activities that consume resources?
a) Traditional Costing
b) Direct Costing
c) Activity-Based Costing (ABC)
d) Standard Costing

(iii) In budgeting, what does a 'master budget' encompass?
a) Only the sales budget
b) The comprehensive set of budgets including sales, production, and cash budgets
c) The production budget alone
d) Only the cash flow budget

(iv) Marginal costing is also known as __________.
a) Direct Costing
b) Variable Costing
c) Contribution Costing
d) All of A, B and C

(v) Fixed cost: - ₹ 2,80,000
Sales: - ₹ 1000,000
P/v ratio: - 30%
Calculate the amount of profit.
a) ₹50,000
b) ₹40,000
c) ₹45,000
d) ₹20,000

(vi) Calculate the material price variance from the following:
Actual Quantity - 3.5 kgs
Standard Price - ₹ 4 per kg
Actual Price - ₹ 8 per kg
Standard Quantity - 4 kgs

a) ₹ 3(F)
b) ₹ 14(A)
c) ₹ 12(A)
d) ₹ 6 (F)

(vii) In the context of cost accounting, what does the term 'relevant cost' refer to?
(a) Costs that have already been incurred and cannot be changed
(b) Costs that are pertinent to a specific decision and will be directly affected by that decision
(c) Costs that are allocated equally across all products
(d) Costs that are used to determine standard pricing.

(viii) A company has a Net Profit Margin of 0.25, total asset turnover is 1.6 times and equity multiplier is 2.5. Calculate ROE as per Du Pont analysis.
a) 0.625
b) 4
c) 1
d) 1.5

(ix) During September, 400 labour hours were worked for a total cost of ₹ 8,800. The variable overhead expenditure variance was ₹ 800 (A). Overheads are assumed to be related to direct labour hours of active working. What was the standard cost per labour hour?
a) ₹ 20
b) ₹ 16.50
c) ₹ 17.50
d) ₹ 18

(x) Responsibility accounting primarily measures which two aspects of responsibility centers?
a) Costs and expenses
b) Budgets and actual results
c) Revenues and sales
d) Employee performance and satisfaction.

(xi) A strategy that yields an expected monetary payoff of zero is called a:
a) Risk-neutral strategy
b) Fair game
c) Zero-sum game
d) Certainty equivalent.

(xii) According to Kaplan & Norton, which of the balanced scorecard perspectives serves as the focus of the other perspectives?
a) Financial
b) Customer
c) Internal business processes
d) Learning & growth.

(xiii) Which of the following would be considered an operating asset in return on investment computations?

a) Land being held for plant expansion
b) Treasury stock
c) Accounts receivable
d) Common stock.

(xiv) What is a primary function of Key Performance Indicators (KPIs) in the role of a Management Accountant?
a) Monitoring compliance
b) Assessing organizational performance
c) Implementing cost reduction strategies
d) Conducting variance analysis

(xv) In a decentralized organization, what role does responsibility accounting play?
a) It helps organization to focus on human resources.
b) It acts as the key management control tool.
c) It limits the authority of lower-level managers.
d) It focuses only on the company's profit margins.

SECTION – B

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

[5 x 14 = 70]

2. (a) How do you classify the functions of the management accountant? **[7]**

(b) ABC Company manufactures four products, A, B, C and D, using the same manufacturing process. The following data are available relating to a production period:

Product	Volume	Material Cost per unit (₹)	Direct Labour per unit	Machine Time per unit	Labour Cost per unit (₹)
A	700	10	0.75 hour	¼ hour	5
B	5,800	15	0.75 hour	¼ hour	7
C	800	18	2 hours	1 hour	12
D	7,500	25	2.25 hours	1.75 hours	11

Total Production Overheads are as under

Particulars	₹
Machine related Costs	37,800
Set-up Costs	4,500
Ordering Costs	2,020
Material Handling Costs	8,400
Spare parts Administration Costs	5,950
	58,670

The Company absorbs factory overheads to the products by machine hour rate method and the hourly rate per machine hour is ₹4.80. The overheads cost of the products are as under:

Product	₹
A	1.2
B	1.2

C	4.8
D	7.2

The production overheads activities for the period reveal the following:

Products	No. of Set-ups	No. of Materials Orders	No. of times Materials handled	Number of Spare parts
A	2	2	2	2
B	6	3	9	6
C	3	2	5	2
D	7	3	12	4

Prepare a Statement of Overhead Cost for all the Products, by using Activity Based Costing and compare the results with Traditional Costing. **[7]**

3. Division A is a profit centre, which produces four products P, Q, R and S. Each product is sold in the externalmarket also. Data for the period is as follows:

	P	Q	R	S
Market Price per unit (₹)	350	345	280	230
Variable Cost of Production per unit (₹)	330	310	180	185
Labour hours required per unit	3	4	2	3

Product S can be transferred to Division B but the maximum quantity that might be required for transfer is 2,000 units of S.

The maximum sales in the external market are:

P - 3,000 units

Q - 3,500 units

R - 2,800 units

S - 1,800 units

Division B can purchase the same product at a slightly cheaper price of ₹ 225 per unit instead of receiving transfers of products S from Division A.

Calculate the transfer price for each unit for 2,000 units of S, if the total labour hours available in Division A are:

(i) 24,000 hours?

(ii) 32,000 hours? **[14]**

4. **(a)** Fashionable Clothing's revenues and cost data for 2023 are as follows:

Particulars	₹	₹
Revenues		9,00,000
Cost of goods sold		4,00,000
Gross margin		5,00,000
Operating costs:		
Salaries (fixed)	2,70,000	

Sales commissions (10% of sales)	90,000	
Depreciation of equipment and fixtures	40,000	
Store rent (4,500 per month)	54,000	
Other operating costs	70,000	5,24,000
Operating income (loss)		(24,000)

Ms. Alpana, the owner of the store, is unhappy with the operating results. An analysis of other operating costs reveals that it includes ₹ 65,000 variable costs, which vary with sales volume, and ₹ 5,000 (fixed) costs.

i. Calculate the contribution margin of Fashionable Clothing.
ii. Calculate the contribution margin percentage.
iii. Ms. Alpana estimates that she can increase revenues by 20% by incurring additional advertising costs of ₹ 38,000. Calculate the impact of the additional advertising costs on operating income. **[7]**

(b) The Management Accountant of XYZ ltd., has prepared the following estimates of working results for the year ending 31st December, 2022 for the purpose of preparing the budgets for the year ending 31st December, 2023.

Year ending 31/12/2022

Direct material	₹/unit	16.00
Direct wages	₹/unit	40.00
Variable overheads	₹/unit	12.00
Selling price	₹/unit	125.00
Fixed expenses	₹	6,75,000 p.a.
Sales	₹	25,00,000 p.a.

During the year 2023, it is expected that the material prices and variable overheads will go up by 10% and 5% respectively. As a result of re-organisation of production methods the overall direct labour efficiency will increaseby 12% but the wage rate will go up by 5%. The fixed overheads are also expected to increase by ₹1,25,000. The technical director states that the same level of output as obtained in 2022 should be maintained in 2023 also and efforts should be made to maintain the same level of profit by suitably increasing the selling price. The marketing director states that the market will not absorb any increase in the selling price. On the other hand he proposes that publicity involving advertisement expenses in the proportions will increase the quantity of sales as under:

Advertisement expenses (₹)	80,000	1,94,000	3,20,000	4,60,000
Additional units of sales	2,000	4,000	6,000	8,000

(i) Prepare an income statement for the year 2023.
(ii) Calculate the revised price and the percentage of increase in the price for 2023 if the Technical Directors' views are accepted.
(iii) Evaluate the four alternative proposals put forth by the Marketing Director, determine

the best output level tobe budgeted and prepare an overall income statement for 2023 at that level of output. **[7]**

5. The standard material cost for 100 kg of chemical D is made up:
Chemical A 30 kg. @ ₹ 4 per kg
Chemical B 40 kg. @ ₹ 5 per kg
Chemical C 80 kg. @ ₹ 6 per kg
In a batch 500 kg.of chemical D were produced from a mix of
Chemical A 140 kg. @ ₹588
Chemical B 220 kg. @ ₹1,056
Chemical C 440 kg. @ ₹2,860
Calculate the different variance in the actual cost per 100 kg. of chemical D over the standard cost. **[14]**

6. a) Budgeted and actual sales for the month of March, 2024 of two products A and B of M/s. XY Ltd. were as follows:

	Budgeted		Actual	
Product	Budgeted Units	Sales Price/Unit (₹)	Actual Units	Sales Price / Unit (₹)
A	8,000	₹8	7,500	8.00
			1,000	7.75
B	14,000	₹4	10,500	4.00
			1,750	3.50

Budgeted costs for Products A and B were ₹7.00 and ₹3.50 per unit respectively. Calculate the following variances from the above data:
Sales Volume Variance, Sales Value Variance, Sales Price Variance, Sales Sub Volume Variance, Sales Mix Variance. **[7]**

b) The following data on production, materials required for products X and Y, and inventory pertain to the budget of LMN Company:

Particulars	Product X	Product Y
Production (Units)	2000	3000
Material (Units)		
A	3.0	1.0
B	4.0	6.5

Particulars	Beginning	Desired Ending	Price/unit
Material inventory:			
A	2000	3000	₹ 2
B	6000	6000	₹ 1.2

i. Analyse the number of material units needed to produce products X and Y

ii. Calculate the cost of materials used for production.
iii. Analyse the number of materials units to be purchased.
iv. Calculate the cost of materials to be purchased. **[7]**

7. a) XYZ Corporation has three divisions whose income statements and balance sheets are summarized below:

	Division X	Division Y	Division Z
Sales	₹5,00,000	(d)	(g)
Operating income	₹25,000	₹30,000	(h)
Operating assets	₹1,00,000	(e)	₹2,50,000
Asset Turnover	(a)	(f)	0.4
Margin	(b)	0.4%	5%
Return on investment (ROI)	(c)	2%	(i)

(i) Calculate the missing data in the table above and summarize the results.

(ii) Comment on the relative performance of each division. What questions can be raised as a result of theirperformance? **[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) Describe decision making under certainty with examples. **[7]**

b) Explain the characteristics of responsibility accounting. **[7]**