MODEL QUESTION PAPER **SET - 2**

INTERMEDIATE **TERM – DECEMBER 2023**

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

1. Multiple Choice Questions: **[15 x 2 = 30]**

(i) Management accounting deals with _______ data.
A. Qualitative
B. Quantitative
C. Both qualitative and quantitative
D. Non-financial

(ii) According to the Chartered Institute of Management Accountants (CIMA), cost attribution to cost units on the basis of benefits received from indirect activities e.g. ordering, setting up, and assuring quality is known as:
A. Absorption costing
B. Marginal costing
C. Activity-based costing
D. Job costing

(iii) The following information relate to ABC

Activity level	60%	80%
Variable costs (₹)	12,000	16,000
Fixed costs (₹)	20,000	22,000

The differential cost for 20% capacity is___________.
A. ₹4,000
B. ₹2,000
C. ₹6,000
D. ₹5,000

(iv) The break-even point is the point at which:
A. There is no profit, no loss;
B. Contribution margin is equal to total fixed cost;
C. Total revenue is equal to total cost;
D. All of the above.

(v) A decrease in sales price ________________________.
A. does not affect the break-even point
B. lowers the fixed cost
C. Increases the break-even point
D. lowers the break-even point

(vi) What will be sales in rupees for desired profit if fixed cost is ₹30,000, desired profit is ₹15,000 and P/V ratio is 30%?
A. ₹1,50,000

B. ₹1,00,000
C. ₹2,00,000
D. None of the above

(vii) Variable cost is also referred to as in the marginal costing technique:
A. Total cost
B. Product cost
C. Period cost
D. None of the above

(viii) The sales and profit of a firm for the year 2021 are ₹1,50,000 and ₹20,000 and for the year 2022 are ₹1,70,000 and ₹ 25,000 respectively. The P/V Ratio of the firm is ______________.
A. 15%
B. 20%
C. 25%
D. 30%

(ix) A company manufactures and sells three types of product namely A, B and C. Total sales per month is ₹ 80,000 in which the share of these three products are 50%, 30% and 20% respectively. The variable cost of these products is 60%, 50% and 40% respectively. The combined P/V Ratio will be:
A. 49%
B. 48%
C. 47%
D. 50%

(x) 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

(xi) Standard costing is a tool, which replaces the bottleneck of the ________________ costing.
A. Present
B. Future
C. Historical
D. None of the above

(xii) During the month of December actual direct labour cost amounted to ₹39,550, the standard direct labour rate was ₹10 per hour and the direct labour rate variance amounted to ₹450 favourable. The actual direct labour hours worked was:
A. 3,955 hours
B. 4,000 hours
C. 3,910 hours
D. 4,500 hours

(xiii) A factory produces two types of articles Y and Z. Article Y takes 8 hours to make and Z takes 16 hours. In a month (25 days x 8 hours) 600 units of X and 400 units of Z are produced. Given budgeted hours 8000 per month and men employed are 50. Determine Activity ratio, Capacity ratio and efficiency ratio.
A. 112%, 140%, 140%
B. 140%, 112%, 140%
C. 140%, 140%, 112%
D. None of the above

(xiv) 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.

(xv) If a decision maker is risk averse, then the best strategy to select is the one that yields the ___________.
A. Highest expected payoff.
B. Lowest coefficient of variation.
C. Highest expected utility.
D. Lowest standard deviation

SECTION – B

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

2. (a) Management Accounting serves as a tool to management – discuss. **[7]**

(b) M Ltd. was absorbing overheads on the basis of direct labour hours. A newly appointed CMA has suggested that the company should introduced ABC system and has identified cost drivers and cost pools as follows:

Activity Cost Pool	Cost Driver	Associated Cost (₹)
Stores Receiving	Purchase Requisitions	2,96,000
Inspection	Number of Production Runs	8,94,000
Dispatch	Orders Executed	2,10,000
Machine set-up	Number of set-up	12,00,000

The following information is also supplied:

	Product A	Product B	Product C
No. of Set-up	360	390	450
No. of Orders Executed	180	270	300
No. of Production Runs	50	1,050	1,200
No. of Purchase Requisitions	300	450	500

Calculate activity based production cost of all the three products. **[7]**

3. Division A is a profit centre that produces three products X, Y and Z and each product has an external market.

The relevant data is as:

	X	Y	Z
External market price per unit (₹)	48	46	40
Variable cost of production (division A) (₹)	33	24	28
Labour hours per unit (division A)	3	4	2
Maximum external sales units	800	500	300

Up to 300 units of Y can be transferred to an internal division B.

Division B has also the option of purchasing externally at a price of ₹45 per unit.

Calculate the transfer price for Y the total labour hours available in division A is:

(a) 3800 hours

(b) 5600 hours **[14]**

4. **(a)** From the following information calculate: **[7]**

(1) P/V Ratio

(2) Break-Even Point

(3) If the selling price is reduced to ₹ 80, calculate New Break-Even Point:

	₹
Total sales	5,00,000
Selling price per unit	100
Variable cost per unit	60
Fixed cost	1,20,000

(b) Y Company has just been incorporated and plan to produce a product that will sell for ₹10 per unit. Preliminary market surveys show that demand will be around 10,000 units per year.

The company has the choice of buying one of the two machines 'A' would have fixed costs of ₹30,000 per year and would yield a profit of ₹30,000 per year on the sale of 10,000 units. Machine `B' would have fixed costs ₹18,000 per year and would yield a profit of ₹22,000 per year on the sale of 10,000 units. Variable costs behave linearly for both machines. **[7]**

Required to calculate:

(i) Break-even sales for each machine

(ii) Sales level where both machines are equally profitable

(iii) Range of sales where one machine is more profitable than the other.

5. Prepare Cash Budget for M/s Alpha Manufacturing Co. on the basis of the following information for the first six months of 2022. **[14]**

(i) Costs and prices remain unchanged.

(ii) Cash Sales are 25% of the total sales and 75% credit sales.

(iii) 60% of credit sales are collected in the month after sales, 30% in the second month and 10% in the third, no bad debts are anticipated.

(iv) Sales forecasts are as follows:

October 2021	₹ 12,00,000	November 2021	₹14,00,000
December 2021	₹16,00,000	January 2022	₹6,00,000
February 2022	₹8,00,000	March 2022	₹8,00,000

April 2022	₹12,00,000	May 2022	₹10,00,000
June 2022	₹ 8,00,000	July 2022	₹12,00,000

(v) Gross profit margin 20%

(vi) Anticipated Purchases:

January 2022	₹6,40,000	February 2022	₹6,40,000
March 2022	₹9,60,000	April 2022	₹8,00,000
May 2022	₹6,40,000	June 2022	₹9,60,000

(vii) Wages and Salaries to be paid:

January 2022	₹1,20,000	February 2022	₹1,60,000
March 2022	₹2,00,000	April 2022	₹2,00,000
May 2022	₹1,60,000	June 2022	₹1,40,000

(viii) Interest on ₹ 20,00,000 @ 6% on debentures is due by end of March and June.

(ix) Excise deposit due in April ₹2,00,000

(x) Capital expenditure on Plant and Machinery planned for June ₹1,20,000

(xi) Company has a cash balance of ₹4,00,000 at 31.12.2021

(xii) Company can borrow on monthly basis.

(xiii) Rent is ₹8,000 per month.

6. (a) The standard mix of product M5 is as follows: **[7]**

LBS	MATERIAL	PRICE PER LB
50	A	5.00
20	B	4.00
30	C	10.00

Standard loss is 10% of input. There is no scrap value. Actual production for month was LB.7240 of M5 from 80 mixes. Purchases and consumption is as follows:

LBs	Material	Price
4160	A	5.5
1680	B	3.75
2560	C	9.5

Calculate variances.

(b) A Glass Manufacturing Company requires you to calculate and present the budget for the next year from the following information:

Sales: Toughened glass	₹3,00,000
Bent toughened glass	₹5,00,000
Direct Material cost	60% of sales
Direct Wages	20 workers @ ₹150 p.m.

Factory Overheads:

Indirect Labour: Works Manager	₹ 500 per month
Foreman	₹ 400 per month
Stores and spares	2½% on sales
Depreciation on machinery	₹ 12,000
Light and power	₹ 5,600
Repairs and maintenance	₹ 8,000

Other sundries 10% on direct wages
Administration, selling and distribution expenses ₹14,000 per year. **[7]**

7. **(a)** H Ltd's current financial year's income statement reports its net income as ₹15,00,000. H's marginal tax rate is 40% and its interest expense for the year was ₹15,00,000. The company has ₹1,00,00,000 of invested capital, of which 60% is debt. **[7]**

In addition, H Ltd. tries to maintain a Weighted Average Cost of Capital (WACC) of 12.6%.

(i) Compute the operating income or EBIT earned by H Ltd. in the current year.

(ii) What is H Ltd's Economic Value Added (EVA) for the current year?

(b) The learning curve as a management accounting has now become or going to become an accepted tool in industry, for its applications are almost unlimited. When it is used correctly, it can lead to increase business and higher profits; when used without proper knowledge, it can lead to lost business and bankruptcy. State precisely:

(i) Your understanding of the learning curve: **[7]**

(ii) Illustrate the use of learning curve for calculating the expected average unit cost of making, (a) 4 machines (b) 8 machines using the data below:

Data:

Direct Labour need to make first machine	= 1000 hrs.
Learning curve	= 90%
Direct Labour cost	= ₹15 per hour.
Direct materials cost	= ₹1,50,000
Fixed cost for either size orders	= ₹60,000.

8. **(a)** The following information is available for a Company: **[7]**

Sales Volume (units)	Probability (%)
10,000	10
12,000	15
14,000	25
16,000	30
18,000	20

Projected sales and costs are as under:
Sales Price per unit: ₹6;
Variable Cost per unit: ₹3.50;
Fixed Costs: ₹34,000

Compute:

(i) Probability that the Company will at least Break-even

(ii) Probability that the Profit will be at least ₹10,000.

(b) List the characteristics of responsibility reporting. **[7]**