INTERMEDIATE EXAMINATION

June 2025

P–12(MA)
Syllabus 2022

MANAGEMENT ACCOUNTING

Time Allowed: 3 hours | Full Marks: 100

The figures in the margin on the right-hand side indicate full marks.
Where considered necessary, suitable assumptions may be made and clearly indicated in the answer.

All working notes should form part of your answer.

Section–A (Compulsory)

1. Choose the correct option: **2×15=30**

(i) '*Period of lost relevance*' is the ____________ of the evolution of management accounting.

(A) 1st Stage

(B) 2nd Stage

(C) 3rd Stage

(D) 4th Stage

(ii) 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.

(iii) AXR Ltd., a manufacturing company, has a break-even point when sales are ₹ 20 lakh and fixed cost is of ₹ 8 lakh. If the selling price is ₹ 5, the P/V Ratio will be ____________.

(A) 50%

(B) 40%

(C) 30%

(D) 20%

(iv) The difference in total cost that results from two alternative courses of action is called

(A) Relevant Cost

(B) Opportunity Cost

(C) Marginal Cost

(D) Differential Cost

(v) A new product is expected to generate the following profits or losses:

Level of Demand	Profit/ (loss) (₹)	Probability
High	1,00,000	0.1
Medium	50,000	0.5
Low	(20,000)	0.4

What is the expected profit or loss from the new product?

(A) Profit ₹ 35,000

(B) Loss ₹ 8,000

(C) Profit ₹ 27,000

(D) Profit ₹ 43,000

(vi) Division A transfers its output to Division B at variable cost. Once a year A charges a fixed fee to B representing an allowance for A's fixed costs. This type of transfer pricing system is commonly known as

(A) Dual pricing.

(B) Opportunity based transfer pricing.

(C) Negotiated transfer pricing.

(D) Two-part tariff transfer pricing.

(vii) ABC Ltd. uses standard costing system. The following information pertains to direct labour for product X for the month of March, 2025:

Standard rate per hour ₹ 8

Actual rate per hour ₹ 8.40

Standard hours allowed for actual production 2,000 hours

Labour efficiency variance ₹ 1,600 (Adverse)

What were the actual hours worked?

(A) 2,200

(B) 2,190

(C) 1,800

(D) 1,810

(viii) The term '*budget slack*' refers to

(A) difference between the budgeted output and the break-even output.

(B) additional capacity available which can be budgeted for.

(C) extended lead-time between the preparation of the functional budgets and the master budget.

(D) deliberate over-estimation of costs and under-estimation of revenues in a budget.

(ix) Which of the following characteristics is not associated with traditional responsibility accounting?

(A) Assumes optimisation of the part will optimise the whole.

(B) Assumes independence of the part.

(C) Places emphasis on the performance of individuals.

(D) Attempts to control the processes.

(x) The following ratios have been calculated for a company:

Gross Profit	42%
Operating Profit margin	28%
Gearing (debt/equity)	40%
Asset Turnover	65%

What is the return on capital employed for the company?

(A) 27.30%

(B) 18.20%

(C) 11.20%

(D) 16.80%

(xi) XYZ Ltd. makes a special gadget for the car it manufactures. The machine for the gadget works to full capacity and incur ₹ 15 lakhs and ₹ 40 lakhs respectively as Variable and Fixed Costs. If all the gadgets were purchased from an outside supplier, the machine could be used to produce other items, which would earn a total contribution of ₹ 25 lakhs. What is the maximum price that XYZ Ltd. should be willing to pay to the outside supplier for the gadgets, assuming there is no change in Fixed Costs?

(A) ₹ 40 lakhs

(B) ₹ 65 lakhs

(C) ₹ 25 lakhs

(D) ₹ 15 lakhs

(xii) A factory is making a certain product where learning curve ratio of 80% and 90% apply respectively for two equally paid workers, A and B. Which of the following statements hold good for the factory?

(A) The labour cost of manufacturing the 4^{th} product will be more for A.

(B) The labour cost of manufacturing the 4^{th} product will be more for B.

(C) The labour cost is the same for the 4^{th} product.

(D) Nothing can be said about the specific product since learning ratio applies to the average quantity of the product.

(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) In a control report of department X, it is mentioned as Indirect materials are ₹ 1,000, Indirect labour ₹ 900, Overtime charges ₹ 100, Depreciation on equipment ₹ 500, Allocated factory overhead (38% of factory space) ₹ 4,300, Allocated overhead of repair shop is ₹ 1,200 (62% repairs in Repair Shop done for department X). Determine total costs treating department X as a responsibility center.

(A) ₹ 3,200

(B) ₹ 2,200

(C) ₹ 1,200

(D) ₹ 8,000

(xv) The value of coefficient of optimism (α) is needed while using the criterion of

(A) Realism

(B) Maximin

(C) Minimax

(D) Equally Likely

Section-B

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

(14×5=70)

2. (a) The business world has radically changed from what it used to be a few decades ago and accordingly the role of the management accountant has also changed significantly. In this context, illustrate the functions of management accountant in a dynamic business world. 7

(b) Hot n Cold, a FMCG company manufactures and sells three flavours of ice cream: Dark chocolate, Chocolate, and Butterscotch. The batch size for the ice cream is limited to 1,000 ice cream based on the size of the fridge and ice cream moulds owned by the company. Based on budgetary projections, the information listed below is available:

	Dark chocolate	**Chocolate**	**Butterscotch**
Projected sales in units	5,00,000	8,00,000	6,00,000
PER UNIT data: (₹)			
Selling price	80	75	60
Direct materials	20	15	14
Direct labour	4	2	2
Hours per 1000-unit batch:			
Direct labour hours	20	10	10
Fridge hours	1	1	1
Packaging hours	0.5	0.5	0.5

Total overhead costs and activity levels for the year are estimated as follows:

Activity	**Overhead costs (₹)**	**Activity levels**
Direct labour		24,000 hours
Fridge	2,10,00,000	1,900 fridge hours
Packaging	1,50,00,000	950 packaging hours

Required:

(i) With the help of traditional system (with direct labour hours as the overhead allocation base), for the Chocolate ice cream, compute the estimated operating profit per thousand ice cream.

(ii) With the help of Activity Based Costing (ABC) system, for the Chocolate ice cream:

A. Compute the activity cost-driver rate.

B. Compute the estimated overhead costs per thousand ice cream.

C. Compute the estimated operating profit per thousand ice cream. 7

3. Colour Paints is a manufacturer of industrial dyes. It can produce and sell at its maximum capacity of 20,000 litres. The sale price is ₹ 100 per litre. The present sales are 15,000 litres.

The current cost structure is as follows:

Direct materials	30% of sales
Direct labour	20% of sales
Variable overheads	₹ 20 per litre
Profit	₹ 15 per litre

To produce over 20,000 litres and up to another 10,000 litres, some balancing equipment are to be installed at a cost of ₹ 10 lakhs and the same will have a life span of 10 years.

The present cost structure is estimated to go up due to price escalation as under:

- 10% in direct materials from its present level of 30%.
- 25% in direct labour from present level of 20%.
- ₹ 50,000 in fixed overheads per year.

There is a proposal from a customer to take 10,000 litres additionally over the present level of output on a long-term basis at a price of ₹ 90 per litre. Apart from the investment of ₹ 10 lakhs, fixed overheads will go up by ₹ 50,000 due to additional administrative expenses.

The company is in dilemma as to whether to accept the order for 10,000 litres or to use the present capacity of 5,000 litres for which there will be additional selling expenses of ₹ 50,000.

As a management accountant of the company give your recommendation. Ignore financing charges. 14

4. (a) AON Ltd has furnished the following data for the Financial Year 2024-25:

Sales	₹ 10,00,000
Contribution to sales ratio	37%
Margin of safety	25%

A decrease in selling price and decrease in the fixed cost could change the 'contribution to sales ratio' to 30% and 'margin of safety' to 40% of the revised sales.

You are required to calculate:

(i) Revised Fixed Cost.

(ii) Revised Sales and

(iii) New Break-Even Point. 7

(b) PIECO Ltd. having an installed capacity of 1,00,000 units of product is currently operating at 70% utilization. At current levels of input prices, the unit costs (after taking credit for applicable export incentives) work out as follows:

Capacity utilization (%)	**Unit costs (₹)**
70	97
80	92
90	87
100	82

The company has received three foreign offers from different sources as under:

Source A: 5,000 units at ₹ 55 per unit.

Source B: 10,000 units at ₹ 52 per unit.

Source C: 10,000 units at ₹ 51 per unit.

Advise the company as to whether any or all the export orders should be accepted or not. 7

5. The operating results of PKS Ltd. for the year ending 31st March, 2025 are summarised below:

	₹ in lakhs
Sales (40,000 units) Less: Trade Discount	48.00 2.40
Net Sales	45.60
Cost of Sales:	
Direct Materials	14.40
Direct Labour	12.60
Factory Overheads	6.30
Administration Overheads	3.60
Selling & Distribution Overheads	4.50

The following changes are to be incorporated in the budget for the year 2025-26:

(i) Sales (units) to be increased by 25%;

(ii) Material price to increase by 15%;

(iii) Direct wages to go up by 12%;

(iv) Overheads—

Factory Overheads will increase by 15%. In addition, a new facility will be added to the factory laboratory at a recurring cost of ₹ 12,500 per year;

Administrative and Selling & Distribution Overheads are estimated to increase by 10% and 14% respectively;

(v) Inventory - No change;

(vi) Profit target for the year has been fixed at ₹ 6 lakhs; and

(vii) No change in the rate of Trade Discount.

Calculate the unit selling price and present the budget for 2025-26 in a meaningful format. 14

6. (a) Budgeted and actual sales for the month of April, 2025 of two products JOY & TOY of M/s Chandan Ltd. were as follows:

Budget			Actual	
Product	**Sales units**	**Selling price per unit**	**Sales units**	**Selling price per unit**
JOY	6,000	₹ 5	5,000	₹ 5.00
			1,500	₹ 4.75
TOY	10,000	₹ 2	7,500	₹ 2.00
			1,750	₹ 1.90

Budgeted costs for products JOY and TOY were ₹ 4 and ₹ 1.50 per unit respectively. Work out from the above data the following variances of the individual products as well as for the company as a whole.

(i) Sales Value Variance;

(ii) Sales Value Price Variance;

(iii) Sales Value Volume Variance;

(iv) Sales Value Mix Variance, and

(v) Sales Value Sub-Volume Variance. 7

(b) The following details apply to an annual budget for Raj & Sons, a manufacturing company:

Quarter	**1st**	**2nd**	**3rd**	**4th**
Working days	65	60	55	60
Production (unit per working day)	100	110	120	105
Raw material purchases (% by weight of annual total)	30%	50%	20%	—
Budgeted purchase price (₹ per kg.)	1	1.05	1.125	—

Quantity of raw material per unit of production: 2 kg.

Budgeted opening stock of raw material: 4000 kg (cost ₹ 4,000).

Budgeted closing stock of raw material: 2,000 kg. Issues are priced on FIFO basis.

Calculate the following budgeted figures:

(i) Quarterly and annual purchases of raw material, by weight and value.

(ii) Closing quarterly stocks by weight and value. 7

7. (a) Sandip Corporation has three divisions whose income statements and balance sheets are summarised below:

Division	**X**	**Y**	**Z**
Sales	₹ 10,00,000	(iv)	(vii)
Operating Income	₹ 50,000	₹ 60,000	₹ 10,000
Operating Assets	₹ 2,00,000	(v)	₹ 5,00,000
Asset Turnover	(i)	(vi)	0.5
Margin	(ii)	0.5%	4%
ROI	(iii)	2.5%	2%

Supply the missing values through (i) to (vii) in the table above. 7

(b) Briefly describe the four perspectives of the Balanced Scorecard of an entity. 7

8. (a) Linku can choose from five mutually exclusive projects. Each project will last for one year only and their net cash inflows will be determined by the prevailing market conditions. The forecast net cash inflows and their associated probabilities are shown below.

Market condition	**Poor**	**Good**	**Excellent**
Probability	0.20	0.40	0.40
	₹ 000	₹ 000	₹ 000
Project Q	550	480	580
Project R	450	500	570
Project S	420	450	480
Project T	370	410	430
Project U	590	580	430

(i) Based on the expected value of the net cash inflows, which project should be undertaken by Linku?

(ii) Calculate the value of perfect information about the state of the market. 7

(b) What is the significance of identifying responsibility centres in responsibility accounting? 7