INTERMEDIATE EXAMINATION

December 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) Which of the following options is not a characteristic of Management Accounting?
- (A) Future-oriented
- (B) Accounting information
- (C) Compulsory Accounting
- (D) Management oriented

(ii) Which personnel of a financial firm play a key role in Management Accounting?
- (A) Investors
- (B) Managers
- (C) Suppliers
- (D) Customers

(iii) Production details of M/s Bani Food Care are as under :

Product	A	B	C	D
Production (units)	1,000	1,100	1,200	1,500
Machine Hours (Per production run)	50	40	30	40

Units are produced in production run of 10 units. If activity cost pool during the period is ₹ 2,25,000 and overheads are absorbed based on machine hour rate, the rate per cost driver is:
- (A) ₹ 10·58
- (B) ₹ 11·84
- (C) ₹ 7·20
- (D) ₹ 6·55

(iv) In Activity Based Costing, an item for which cost measurement is required is called
- (A) Cost Driver
- (B) Cost Object
- (C) Cost Pool
- (D) Cost Matrix

(v) M/s Bishnu Limited sells two products, A and B in the ratio of 3 : 2. Variable cost as percentage of sales for product A and B is 95% and 90% respectively. If total fixed cost is ₹ 7,000, Break Even Point (BEP in ₹) for M/s Bishnu Limited is

(A) ₹ 1,00,000
(B) ₹ 1,20,000
(C) ₹ 1,50,000
(D) ₹ 80,000

(vi) A company's sales decline from ₹ 9,00,000 to ₹ 7,00,000, causing a profit of ₹ 50,000 to become a loss of ₹ 50,000. What is the company's P/V ratio?

(A) 25%
(B) 40%
(C) 50%
(D) 100%

(vii) ABCA manufacturing company is evaluating two machines for its production line. The associated costs are as follows:

Machine Type	**Variable Cost per Unit (₹)**	**Total Fixed Cost (₹)**
Semi-Automated	10	12,000
Fully-Automated	4	30,000

Based on a total cost analysis, which of the following decisions is correct?

(A) The Semi-Automated machine should be chosen if the expected production is 2,500 units.
(B) The Fully-Automated machine should be chosen if the expected production is 2,500 units.
(C) The Semi-Automated machine should be chosen if the expected production is 3,500 units.
(D) The choice between machines does not matter if production is 3,500 units.

(viii) Which of the following is not a method of transfer pricing?

(A) Total Cost Method
(B) Marginal Cost Method
(C) Skimming Price Method
(D) Market Price Method

(ix) A company's budget and actuals for a period are as follows:

Budgeted production: 6,000 units

Budgeted variable overhead: ₹ 1,20,000

Standard time for one unit: 2 hours

Actual production: 5,900 units

Actual overhead incurred: ₹ 1,22,000

Actual hours worked: 11,500 hours

What is the Variable Overhead Cost Variance?

(A) ₹ 4,000 (F)

(B) ₹ 4,000 (A)

(C) ₹ 7,000 (A)

(D) ₹ 7,000 (F)

(x) M/s Enstore Limited produces 500 units of product A in 12 hours per unit against standard hours of 16 per unit. If standard rate per hour is ₹ 48 and actual rate per hour is ₹ 52, then labour efficiency variance will be

(A) ₹ 96,000 (F)

(B) ₹ 96,000 (A)

(C) ₹ 1,04,000 (F)

(D) ₹ 1,04,000 (A)

(xi) A _____ is a budget which is continuously updated by adding a further accounting period when the earlier accounting period has expired.

(A) Zero Base Budgeting

(B) Rolling Budget

(C) Master Budget

(D) Continuous Budget

(xii) A division of a company has operating assets of ₹ 5,00,000 and generates an operating income of ₹ 1,00,000. If the company's minimum required rate of return is 15%, what is the division's Residual Income (RI)?

(A) ₹ 1,00,000

(B) ₹ 75,000

(C) ₹ 25,000

(D) ₹ 35,000

(xiii) Which one of the following Responsibility Centres is an organizational unit whose manager is responsible for generating revenues and managing expenses related to current activity?

(A) Cost Centre

(B) Profit Centre

(C) Revenue Centre

(D) Investment Centre

(xiv) A business is deciding between 3 different investment options (A, B and C). The profitability of each option depends on 4 possible economic scenarios (Recession, Stability, Growth & Boom). How many unique payoff values will exist in the payoff table for this decision problem?

(A) 3

(B) 4

(C) 7

(D) 12

(xv) Two investment projects have the following characteristics:

Project	Expected Return	Standard Deviation of Return
A	20%	15%
B	10%	9%

Which project is relatively riskier?

(A) Project A, because its standard deviation is higher.

(B) Project B, because its standard deviation is lower relative to its return.

(C) Project A, because its coefficient of variation is higher.

(D) Project B, because its coefficient of variation is higher.

SECTION–B

Answer *any five* questions out of seven questions given. Each question carries 14 marks. **14×5=70**

2. (a) **Distinguish** between Management Accounting and Financial Accounting. 7

(b) Innovate Robotics Ltd. specializes in manufacturing two advanced industrial robots: the Robo-Welder (Model RW-1) and the Robo-Painter (Model RP-2). The company currently absorbs its factory overheads based on direct labour hours.

For the upcoming month, the company has budgeted total overheads of ₹ 37,50,000 and 50,000 direct labour hours. Further details for the two product lines are as follows:

Particulars	Robo-Welder (RW-1)	Robo-Painter (RP-2)
Budgeted Production Volume	6,400 units	7,700 units
Direct Material Cost	₹ 700 per unit	₹ 800 per unit
Direct Labour Cost	₹ 720 per unit	₹ 960 per unit

Note: Labour is paid @₹ 240 per hour.

A recent analysis has identified that the total factory overheads of ₹ 37,50,000 can be traced to three primary activities:

I. Order Processing: ₹ 7,50,000
II. Machine Processing: ₹ 25,00,000
III. Product Inspection: ₹ 5,00,000

These activities are driven by specific cost drivers. The relevant data for these drivers is provided below:

Product	Orders Processed	Machine Hours Worked	Inspection Hours
Robo-Welder (RW-1)	400	22,500	5,000
Robo-Painter (RP-2)	200	27,500	15,000
Total	600	50,000	20,000

Required:

(i) Determine the cost driver rate for each activity.
(ii) Prepare a statement showing the total manufacturing cost per unit for both RW-1 and RP-2 assuming the budgeted production is achieved. 7

3. (a) Your Home Ltd. (YHL) manufactures a kitchen appliance that consists of four components. Each component can either be produced in-house or purchased from external suppliers. The cost details, market prices and other relevant information for these components are given below:

Components	A	B	C	D
Number of units required	3,000	3,500	2,000	3,000
	Figures in ₹ per unit			
Direct Material	120	140	150	120
Direct Labour	60	80	120	80
Direct Expenses @ ₹ 40 per machine hour	80	60	80	80
Fixed Cost	40	40	30	50
Total Cost	300	320	380	330
Market Price	300	320	400	270

There are constraints in the machine time manufacturing all the components. Total machine hours available is only 12,000 hours. It is possible to use the machine time in a second shift which will attract 20% extra wages and other fixed overheads at ₹ 6,000 for every 1,000 hours or part thereof.

Based on the above situation, **you are required to determine** the most cost-effective make-or-buy decision for the four components. Please support your answer with relevant workings. 7

(*Note*: *Students need not work out the complete profitability statement.*)

(b) Gemini Electricals follows a cost-plus pricing method for inter-divisional transfers, where transfer prices are calculated by adding an estimated return to the cost incurred by each division. The relevant portion of the budget for the Division A for the year 2025-26 is given below:

Fixed Assets	₹ 5,00,000
Current Assets other than Debtors	3,00,000
Debtors	2,00,000
Annual fixed cost of the division	8,00,000
Variable costs per unit of product	10
Budgeted volume of production per year (units)	4,00,000
Desired return on Investments	28%

(i) **You are required** to determine the transfer price for the Division A.

(ii) Suppose Division A sells 20% of its output in the external market at a competitive price of ₹ 14 per unit. **Discuss** how this external selling price may influence the transfer price charged to other divisions, given that Division A cannot increase the output beyond 4,00,000 units. 7

4. (a) Happy Holiday Home organizes excursion trips for school children on a payment basis. Relevant information for a proposed excursion trip is given below:

	Amount (₹)
Revenue per trip per child	4,000
Expenses that have to be incurred:	
Train fare per child per trip	1,700
Meals per child per trip	300
Craft Materials per child per trip	600
Room rent per trip (4 children can be accommodated in a room.)	760
Local Transport at picnic spots (per vehicle) (Each vehicle can accommodate the seats for 6 children excluding the driver.)	1,200

Fixed costs that are required to be covered in a trip is ₹ 5,18,130.

Find the minimum number of children to cross the break-even point. 7

(b) RRS Ltd., a consumer goods manufacturer uses a large volume of tin containers, which are sold on a returnable basis to their local distributors, who are required to deposit ₹ 25 per tin, refundable on return of the tins. The company incurs a cost of ₹ 32 per tin, which depending upon its condition on return, can be used six to eight times. Unusable tins are sold as scrap at ₹ 8 per tin; normally, 15,000 tins are scraped each month.

The company has received a suggestion from an employee to convert such scrapped tins into usable lids for the container, as a cost reduction proposal. Following data is available concerning this proposal:

(i) Each rejected tin can be converted into 5 lids of acceptable quality, after rejections.

(ii) Cost of conversion into lids is ₹ 50 per 100 pcs.

(iii) Each tin weights 1 kg and each lid weights 120 gms.

(iv) Scrapped lids and other off-cuts of the tin can be sold @ ₹ 5/kg.

(v) Company's requirements of lids are one lakh per month, which it currently buys at ₹ 2 per pc.

Required:

(I) An evaluation of the proposal with supporting workings whether or not to accept the proposal.

(II) A statement of estimated savings that will accrue to the company, if the proposal is accepted. 7

5. (a) The standard cost data of three products X, Y and Z manufactured by Preet India LLP (PIL) are given below together with the budgeted sales and unit selling prices for 2024-25:

	X	Y	Z
Budgeted sales (units)	25,000	20,000	15,000
Selling price per unit (₹)	40	60	80
Cost per unit (₹)	28	48	64

In April 2025, the cost department of PIL gathered the following details for 2024-25:

	X	Y	Z
Actual sales (units)	20,000	22,000	16,000
Average Selling price per unit (₹)	42	56	81
Actual Cost per unit (₹)	30	50	63

You are required to determine

(i) Budgeted profit and actual profit for 2024-25

(ii) The variance in profit analysed into:

(I) Cost Variance

(II) Sales Price Variance

(III) Sales Volume Variance 7

(b) The standard set for a chemical mixture of ChemCo Ltd. is as under:

Material	Standard Mix (%)	Standard Price (₹/kg)
A	80	50
B	20	100

Standard yield in production is 75%.

The actual quantity produced was 1,800 kg of output from the following:

Material	Quantity (kg)	Actual Price (₹/kg)
A	1400	60
B	600	90

Calculate the total material price, mix and yield variances. 7

6. (a) The factory of RS Ltd. is currently running at 50% capacity and produces 5,00,000 units at a cost of ₹ 900 per unit as per details given below:

Material	₹ 500
Labour	₹ 150
Factory Overheads	₹ 150 (₹ 60 fixed)
Administrative Overheads	₹ 100 (₹ 50 fixed)

The current selling price is ₹ 1,000 per unit.

At 60% working, material cost per unit increases by 2% and selling price per unit falls by 2%.

At 80% working, material cost per unit increases by 5% and selling price per unit falls by 5%.

Estimate the profits of the factory at 60% and 80% working and offer your comments. 7

(b) Chandana is a large retailer of consumer durables. 25% of her sales are for cash; the balance is on one month's credit, though at least 20% (of the total sales) end up being collected in the second month following sales. You are given the following data:

Total Sales achieved in	**₹ in Lakhs**
January 2025	100
February 2025	120
March 2025	160
Total Sales estimated in	
April 2025	200
May 2025	200
June 2025	200

Required:

(i) Schedule of cash collections expected during April, May and June, 2025.

(ii) An estimate of additional collection in April, May and June, if credit period of 1 month is to be enforced strictly. 7

7. (a) M/s Sagar Limited has reported the following financial data for the financial year ended 31-03-2025:

Particulars	**Amount (in ₹)**
Net Operating Income before tax	1,20,000
Sales	12,00,000
Total Assets	8,00,000
Shareholder' Equity	4,00,000
Interest Expenses (after tax)	20,000
Tax rate	25%
Capital Employed (Debt + Equity)	6,00,000
Weighted Average Cost of Capital (WACC)	10%

You are *required to*:

(i) Analyze Return on Equity (ROE) using DuPont Analysis.

(ii) Assess the Economic Value Added (EVA) and interpret whether the company is creating or destroying the shareholders' value.

(iii) Discuss the relationship between DuPont ROE and EVA. 7

(b) CS LLP has designed a new type of sailing boat. They have just completed an initial run of 30 boats at the following costs:

Direct Materials	₹ 20,000
Direct Labour	₹ 24,000
Tooling Cost (re-usable)	₹ 3,000
Variable Overhead (₹ 0·50 per labour hour)	₹ 3,000
Fixed Overheads (₹ 0·50 per labour hour)	₹ 6,000

The firm has been asked to bid on a prospective contract for 90 sailing boats. An 80% learning curve is thought to be pertinent in this case. The Marketing Director believes that the quotation is unlikely to be accepted if it exceeds ₹ 1,10,000 and as the company is short of work, he believes the contract is vital.

You are required to calculate the profit / loss if the contract is accepted at ₹1,10,000. 7

8. (a) Swadist Ltd., a food product company, is contemplating the introduction of a revolutionary new product with new packaging to replace the existing product at a much higher price (S1), or, a moderate change in the composition of the existing product with a new packaging at a small increase in price (S2), or, a small change in the price (S3).

The possible states of nature or, events are:

(i) high increase in the sales (N1),

(ii) no change in the sales (N2) and

(iii) decrease in the sales (N3).

The marketing department of the Company worked out the pay-offs in terms of yearly net profits for each of the strategies for these events (expected sales). This is represented in the following table:

Pay-offs (in ₹)

	States of Nature		
Strategies	**N1**	**N2**	**N3**
S1	7,00,000	3,00,000	1,50,000
S2	5,00,000	4,50,000	0
S3	3,00,000	3,00,000	2,00,000

***Required*:**

Identify a course of action for Swadist Ltd. based on

(i) Maximin Criterion

(ii) Maximax Criterion

(iii) Laplace Criterion

(iv) Hurwicz Criterion [Alpha = 0·4] 7

(b) What are the characteristics of responsibility reporting? 7