

Mock Test Paper - Series I: July, 2026

Date of Paper: 31st July 2026

Time of Paper: 10 A.M.- 1 P.M.

INTERMEDIATE: GROUP – II

PAPER – 4: COST AND MANAGEMENT ACCOUNTING

Answers are to be given only in English except in the case of the candidates who have opted for Hindi medium. If a candidate has not opted for Hindi medium his/her answer in Hindi will not be evaluated.

Working notes should form part of the answer.

Time Allowed – 3 Hours

Maximum Marks – 100

1. *The question paper comprises two parts, Part I and Part II.*
2. *Part I comprises Case Scenario based Multiple Choice Questions (MCQs) for 30 marks*
3. *Part II comprises questions which require descriptive type answers for 70 marks.*

PART I – Case Scenario based MCQs

Part I is compulsory.

Write the most appropriate answer to each of the following multiple-choice questions by choosing one of the four options given. All questions are compulsory.

Case Scenario 1.

Aarav Industrial Resins Pvt. Ltd., headquartered in Ghaziabad, is engaged in manufacturing specialty chemicals used in the paints, laminates, and adhesives industry. The company operates a continuous two-stage production system.

The company produces a base intermediate resin called “Phenolic Resin Base” in the first stage. This intermediate product can either:

- Be sold directly to small-scale manufacturers, or
- Be further processed into a higher-grade “Laminated Resin Compound”, which commands a better market price.

Following stage 1 production data and cost data are given for the month just ended:

Raw material input	: 2,20,000 kg
Opening Work-in-Progress	: 50,000 kg
(Materials 100% complete, Conversion 60% complete)	
Output transferred/sold	: 1,70,000 kg
Closing Work-in-Progress	: 40,000 kg
(Materials 100% complete, Conversion 70% complete)	
Normal process loss: 20% of Current input	
(Loss occurs due to evaporation and chemical reactions; no scrap value)	

Particulars	Amount (₹)
Raw Material Cost (Current Month)	88,000
Conversion Costs (Current Month)	1,20,000
Opening WIP	
– Material	25,000
– Conversion	15,000

The intermediate product can be sold in the open market at ₹1.80 per kg. Out of the total production, 50,000 kg were sold directly, while 1,20,000 kg were transferred to the second stage for further processing into a higher-grade product.

The further processing details in the Finishing and Compounding Unit are as follows:

In this stage, additional materials such as fillers and additives are introduced, resulting in an output where each kilogram of Phenolic Resin Base yields 2 kilograms of Laminated Resin Compound. The finished product is sold at ₹ 2.40 per kg in the market.

The monthly costs incurred in Process II (other than the cost of Product 'Phenolic Resin Base') are:

Input Quantity (Base Resin)	Material Cost (₹)	Processing Cost (₹)
1,20,000 kg	1,50,000	1,30,000
1,60,000 kg (Full Capacity)	2,00,000	1,55,000

The management is currently evaluating operational efficiency and profitability decisions based on the above information:

They are particularly interested in determining the cost per unit of the intermediate product, valuation of completed output and work-in-progress, profitability of further processing, and the feasibility of utilizing idle capacity in the second stage.

The finance team has been asked to compute the following requirements (MCQs 1 to 5):

1. What is the cost per kg of Phenolic Resin Base in Stage 1 using the weighted average cost method?
 - (A) ₹ 0.90
 - (B) ₹ 1.13
 - (C) ₹ 1.20
 - (D) ₹ 1.35
2. What is the total value of output completed during the month? (Round off intermittent calculations to three decimal places)
 - (A) ₹ 1,92,270
 - (B) ₹ 1,78,500
 - (C) ₹ 2,04,000
 - (D) ₹ 2,10,000
3. What is the value of closing work-in-progress for the month? (Round off intermittent calculations to three decimal places)
 - (A) ₹ 32,000
 - (B) ₹ 36,500
 - (C) ₹ 40,000
 - (D) ₹ 37,668
4. What is the incremental profit or loss on further processing 1,20,000 kg of Phenolic Resin Base into Laminated Resin Compound?
 - (A) Profit ₹ 80,000
 - (B) Profit ₹ 48,000
 - (C) Loss ₹ 24,000
 - (D) Loss ₹ 12,000

5. What is the minimum acceptable selling price per kg of Laminated Resin Compound for additional production using spare capacity?

- (A) ₹ 1.60
- (B) ₹ 1.84
- (C) ₹ 2.00
- (D) ₹ 2.20

(5 x 2 = 10 Marks)

Case Scenario 2

Himalayan Bakers Pvt. Ltd., a mid-sized bakery chain headquartered in Dehradun, produces its signature product "Multigrain Loaf" for retail and hotel supply. Each loaf requires 2.5 kg of Multigrain Flour Mix (MFM) as the key raw material.

Based on a sales forecast prepared by the company's regional sales heads (factoring in new hotel contracts and an upcoming bakery outlet expansion), Himalayan Bakers expects to sell 12,000 units of Multigrain Loaf in the coming financial year.

The purchase manager, Ms. Tanya Bhatt, has compiled the following details regarding MFM from the stores and finance departments:

Particulars	Details
(i) Re-order Quantity	280 kg less than the EOQ
(ii) Maximum consumption per day	25 kg more than the average consumption per day
(iii) Opening stock of MFM	1,200 kg
(iv) Lead time from suppliers	Minimum 3 days, Maximum 7 days
(v) Purchase price of MFM	₹ 95 per kg
(vi) Opening stock of finished Multigrain Loaves	1,100 units
(vii) Bank's Cash Credit interest rate (treated as carrying cost %)	14.4% per annum
(viii) Documentation/paperwork cost per order	₹ 540

(Assume 364 days in a year for all calculations and also assume that henceforth, the closing stocks are not required.)

You are required to answer the following questions (MCQs 6 to 10)

6. What is the Re-order Quantity (ROQ) of MFM?

- (A) 1,434 kg

- (B) 1,154 kg
 - (C) 1,716 kg
 - (D) 999 kg
7. What is the Maximum Stock Level of MFM?
- (A) 1,690 kg
 - (B) 1,720 kg
 - (C) 1,217 kg
 - (D) 699 kg
8. What is the Minimum Stock Level of MFM?
- (A) 699 kg
 - (B) 374 kg
 - (C) 323 kg
 - (D) 318 kg
9. What is the total cost of purchase of raw material if the company orders at ROQ?
- (A) ₹ 25,88,750
 - (B) ₹ 24,95,063
 - (C) ₹ 26,09,166
 - (D) ₹ 27,00,000
10. What is the extra annual cost the company bears by ordering at ROQ instead of the true EOQ? (Number of orders should be rounded off to next whole number.)
- (A) ₹ 244
 - (B) ₹ 351
 - (C) ₹ 540
 - (D) ₹ 695
- (5 x 2 = 10 Marks)**

11. A company is preparing a quotation for a customised engineering project. The project requires 40 kg of Material P. The company has 200 kg of Material P in stock, originally bought at ₹ 10 per kg.

Material P, if processed further at a cost of ₹ 3 per kg, can be converted into Material Q, which the company currently purchases from the market at ₹ 9 per kg.

What is the relevant cost of using Material P for the new project?

- (A) ₹40
- (B) ₹160
- (C) ₹ 240
- (D) ₹ 200

(2 Marks)

12. A company plans to produce 50,000 units of finished goods during the upcoming budget period. Each finished unit requires 3 units of raw material. At the beginning of the period, the company has 80,000 units of raw material in inventory. By the end of the period, the company wants to increase the raw material inventory to 90,000 units.

Based on this information, calculate how many units of raw material need to be purchased during the budget period.

- (A) 1,40,000 units
- (B) 1,50,000 units
- (C) 1,60,000 units
- (D) 1,70,000 units

(2 Marks)

13. What would be Prime cost from below information?

Direct materials Purchased	:	₹ 75,000
Direct labour	:	₹ 45,000
Direct expenses	:	₹ 15,000
Manufacturing overheads	:	₹ 22,500
Direct materials consumed	:	₹ 67,500

- (A) ₹ 1,35,000
- (B) ₹ 1,27,500
- (C) ₹ 1,57,500
- (D) ₹ 1,50,000

(2 Marks)

14. Based on the data below, what is the amount of the overhead under-/over-absorbed?

Budgeted overhead – ₹ 5,25,000

Budgeted machine hours - 17,500

Actual machine hours - 17,040

Actual overheads - ₹ 5,20,000

- (A) ₹ 5,000 under-absorbed
- (B) ₹ 8,800 under-absorbed
- (C) ₹ 8,800 over-absorbed
- (D) ₹ 5,000 over-absorbed

(2 Marks)

15. The following extract is taken from the overhead budget of X:

Budgeted activity	50%	75%
Budgeted overhead (₹)	30,00,000	40,00,000

What would be the budgeted overhead for 60% level of activity:

- (A) ₹ 32,00,000
- (B) ₹ 34,00,000
- (C) ₹ 30,00,000
- (D) ₹ 36,00,000

(2 Marks)

Part II - Descriptive Questions

1. (a) Greenfield Apparel Manufacturing Ltd., a garment export unit located in Tirupur, Tamil Nadu, employs a team of skilled tailoring and finishing-line workers. As part of its annual cost audit, the HR and Costing department has been asked to determine the true cost of employing each worker — including hidden costs like idle time, welfare schemes, and statutory contributions — so that pricing for export orders can be set accurately.

The following data has been extracted from the company's payroll and cost records for the year:

Particulars	Details
(i) Salary (each employee, per month)	₹ 28,000
(ii) Bonus	20% of salary
(iii) Employer's contribution to PF, ESI, etc.	12% of salary
(iv) Total cost of employees' welfare activities	₹ 5,28,000 per annum
(v) Total leave permitted during the year	24 days
(vi) No. of employees	220
(vii) Normal idle time	60 hours per annum

(viii)	Abnormal idle time (due to machine breakdown)	40 hours
(ix)	Working days without leave per annum	312 days of 8 hours
(x)	Overtime worked	100 hours per annum, paid at double the normal hourly rate

You are required to CALCULATE:

- (i) The Annual Cost of each employee
 - (ii) The Employee Cost per Hour
 - (iii) The Cost of Abnormal Idle Time per employee, arising from the machine breakdown — information the production manager needs to justify a compensation claim against the equipment supplier
 - (iv) The Overtime Premium per employee, and whether it should be treated as part of normal employee cost or charged separately. **(5 Marks)**
- (b) Krishna Auto Components Pvt. Ltd., an auto-ancillary unit based in Pune manufacturing precision metal parts for two-wheeler assembly lines, prepares a quarterly cost sheet for internal management review and for pricing discussions with its OEM clients. The cost accountant has compiled the following data for the quarter ending 31st March 2026 and has been asked to present a complete cost sheet — from raw material consumption all the way down to profit — before the upcoming board review.

The following details have been gathered:

Particulars	Amount
(i) Direct expenses	₹ 1,65,000
(ii) Direct wages, being 180% of factory overheads	₹ 2,70,000
(iii) Cost of goods sold	₹ 17,40,000
(iv) Selling & distribution overheads	₹ 52,000
(v) Sales	₹ 20,60,000
(vi) Administration overheads related to production, being 8% of factory overheads	

Stock details as per Stock Register:

Particulars	31.12.2025 (₹)	31.03.2026 (₹)
Raw material	2,20,000	1,95,000
Work-in-progress	1,55,000	1,72,500
Finished goods	2,90,000	2,60,000

You are required to PREPARE a Cost Sheet showing:

- (i) Raw material consumed
- (ii) Prime cost
- (iii) Factory cost
- (iv) Cost of goods sold
- (v) Cost of sales and profit **(5 Marks)**

- (c) M Ltd. has an annual fixed cost of ₹ 28,50,000. In the year 2024-25, sales amounted to ₹ 7,80,60,000 as compared with ₹ 4,80,60,000 in the preceding year 2023-24. The profit in the year 2024-25 is ₹ 37,50,000 more than that in 2023-24.

Required:

- (i) CALCULATE Break-even sales of the company;
- (ii) DETERMINE profit/ loss on a forecasted sales volume of ₹12,00,00,000.
- (iii) If there is a reduction in selling price by 10% in the financial year 2025-26 and company desires to earn the same amount of profit as in 2024-25, WHAT would be the required sales volume? **(4 Marks)**

2. (a) Riya Engineering Works undertakes job work on a contract basis. The following information is available in respect of Job No. 707, which was completed during the month of June:

Particulars	Details
Direct Materials issued	₹ 45,000
Direct Materials returned to stores	₹ 3,000
Direct Labour: 250 hours @ ₹ 80 per hour	
Direct Expenses	₹ 6,000
Factory Overhead	60% of Direct Labour cost
Administration Overhead	10% of Works Cost
Selling & Distribution Overhead	8% of Cost of Production
Profit margin desired by the company	20% on Selling Price

Additional Information:

Rectification of defective work (additional direct labour of 15 hours @ ₹ 80 per hour, plus direct material of ₹ 1,200, required to rework units rejected at final inspection — defect arose due to a normal, recurring tolerance issue in this type of job)

You are required to:

- (i) PREPARE a Job Cost Sheet for Job No. 707, showing Prime Cost, Works Cost (Factory Cost), Cost of Production, and Total Cost.
 - (ii) CALCULATE the price to be quoted to the customer for Job No. 707, given that profit is desired at 20% on selling price.
 - (iii) Briefly STATE how your treatment in (i) would differ if the defect had instead arisen due to an abnormal cause (e.g., a one-off machine malfunction). **(7 Marks)**
- (b) In a bid to promote regional tourism, the Civil Aviation Ministry has granted Sky Connect Airways Pvt. Ltd. a permit to operate four flights a week between cities P and Q (both directions), as part of its regional connectivity scheme. The airline plans to deploy a single aircraft with a seating capacity of 180 seats. Based on historical data for similar routes, the airline's revenue team estimates a normal occupancy of 65% throughout the year of 52 weeks.

The airline's costing department has compiled the following data to assess the route's profitability and to evaluate a proposed fare-reduction scheme:

Particulars	Details
One-way fare	₹ 7,800
Fuel cost (variable)	₹ 1,05,000 per flight
Food served on board (non-chargeable basis)	₹ 140 per passenger
Commission	6% of fare, applicable on all bookings
Passenger tax	₹ 150 per passenger, payable to the airport authority
Aircraft lease	₹ 3,80,000 per flight
Landing charges	₹ 78,000 per flight
Ground handling and parking charges	₹ 45,000 per flight

You are required to:

- (i) CALCULATE the net operating income per flight.
- (ii) The airline expects that occupancy will increase to 130 passengers per flight if the fare is reduced to ₹ 7,150. Advise, with supporting calculations, WHETHER this proposal should be implemented.

- (iii) CALCULATE the Total Takings per flight for the current bookings (i.e., Net Takings plus Passenger Tax collected), which the finance team needs to report separately to the airport regulatory authority. **(7 Marks)**

3. (a) Silver Star Ltd. manufactures four products, namely X, Y, Z, and W using the same plant and process. The following information relates to a production period:

Product	X	Y	Z	W
Output in units	800	650	500	550
Cost per unit (₹)				
— Direct Material	50	55	45	60
— Direct Labour	12	10	8	9
Machine hours/unit	5 hrs.	3.5 hrs.	2.5 hrs.	1.5 hrs.

The four products are similar and are usually produced in production runs of 25 units and sold in batches of 10 units. Machine hour rate is currently used to absorb production overheads. The total overheads incurred by the company for the period are as follows:

Overhead Category	Amount (₹)
Machine operation and maintenance cost	75,000
Setup costs	25,000
Store receiving	18,000
Inspection	12,000
Material handling and dispatch	3,500

During the period the following cost drivers are to be used for the overhead costs:

Activity	Cost Driver
Setup cost	Number of production runs
Store receiving	Requisitions raised
Inspection	Number of production runs
Material handling and dispatch	Orders executed

It is also determined that:

- Machine operation and maintenance cost should be apportioned between setup cost, store receiving, and inspection activity in 5:3:2.

- Number of requisitions raised on store is 60 for each product, and the number of orders executed is 220, each order being for a batch of 10 units of a product.

Required:

- CALCULATE the total cost of each product, if all overhead costs are absorbed on a machine hour rate basis.
 - CALCULATE the total cost of each product using activity-based costing.
 - COMMENT briefly on the differences disclosed between overhead allocated by the present system and overhead traced under activity-based costing. **(9 Marks)**
- (b) A manufacturing company has disclosed net loss of ₹ 48,700 as per their cost accounting records for the year ended 31st March, 2026. However, their financial accounting records disclosed net profit of ₹ 35,400 for the same period. A scrutiny of data of both the sets of books of accounts revealed the following information:

	(₹)
(i) Factory overheads under absorbed	30,500
(ii) Administrative overheads over absorbed	65,000
(iii) Depreciation charged in financial accounts	2,25,000
(iv) Depreciation charged in cost accounts	2,70,000
(v) Income-tax provision	52,400
(vi) Transfer fee (credited in financial accounts)	10,200
(vii) Obsolescence loss charged in financial accounts	20,700
(viii) Notional rent of own premises charged in cost accounts	54,000
(ix) Value of opening stock:	
(a) in cost accounts	1,38,000
(b) in financial accounts	1,15,000
(x) Value of closing stock:	
(a) in cost accounts	1,22,000
(b) in financial accounts	1,12,500

Prepare a Memorandum Reconciliation Account by taking costing loss as base.

(5 Marks)

4. Astra Components Pvt. Ltd. is a Tier-2 supplier to the electrical vehicle (EV) industry. The company manufactures a single machined housing component in a single cost centre. Management uses standard costing for control and performance measurement.

The Standard Cost Card for the component is as follows:

Standard — Unit cost (₹)

- Direct material: 6.00 kg @ 5.00 per kg = 30.00
- Direct labour: 2.50 hours @ 4.50 per hour = 11.25
- Factory overhead: 2.00 per labour hour = 5.00
- Total standard manufacturing cost per unit = ₹ 46.25

Budget & actual production activity for the month of June 2025:

- Production scheduled (required completion) for the month: 50,000 units.
- Actual completed units during the month: 51,200 units (no opening or closing WIP).
- Purchases of direct material during the month: 3,20,000 kg at ₹ 5.20 per kg.
- Actual material used in production: 2,96,000 kg.
- Actual direct labour hours worked: 125,000 hours; total labour cost incurred: ₹ 6,40,000.
- Actual total factory overhead incurred during the month: ₹ 2,80,000.
- Sales during the month: 50,000 units.

Selling price policy: Selling price is to be fixed so as to allow a mark-up of 25% on the selling price (i.e., profit = 25% of selling price and standard manufacturing cost per unit should be considered for the same.)

Incentive scheme: The company operates a labour bonus scheme — employees are paid a bonus equal to 60% of the standard direct labour rate for each standard direct labour hour saved (i.e., for hours saved compared to standard hours allowed for actual output).

Required: Using the above data, prepare calculations and reports for June 2025 as follows:

- (i) CALCULATE all material variances based on actual material consumption.
- (ii) CALCULATE the labour variances (rate and efficiency) and compute the total factory overhead variance.
- (iii) PREPARE an Income Statement for June 2025 showing the actual gross margin
- (iv) COMPUTE if any bonus is payable under the incentive scheme. **(14 Marks)**

5. (a) Kantur Ltd. is a medium-sized manufacturer of precision components used in the automobile aftermarket. The factory runs a single production line where two product variants (Product A and Product B) are made from the same raw material and by the same grade of direct labour. Management is preparing the master budget for the next period and wants the material purchases and direct wages budgets prepared so that procurement and staffing decisions can be finalised.

Below is an extract from the company's budget working papers (all figures are for the whole budget period unless stated otherwise):

Production & material data

Particulars	Product A	Product B
Budgeted sales (units)	2,100	2,700
Budgeted material consumption per product (kg)	6.00	2.50
Budgeted material cost	₹ 14 per kg (for both products)	
Standard hours allowed per product	6.0	5.0
Budgeted basic wage rate	₹ 9 per hour (for all direct workers)	

Labour / working-time assumptions

- Overtime premium is 60% of the basic wage rate and is payable for any hours worked over 40 hours in a 5-day week.
- There are 48 direct workers available in the budget period.
- The target productivity (efficiency) ratio for productive hours actually used in manufacturing is 85%. In addition, non-productive downtime (set-up, maintenance, unavoidable delays) is budgeted at 15% of the productive hours worked.
- The budget period contains thirteen 5-day weeks and production and it is anticipated that sales and production will occur evenly throughout the whole period.

Opening and desired closing stocks

- Expected opening stocks at the start of the budget period: Product A 600 units; Product B 1,000 units; Raw material 2,800 kg.

- Target closing stocks (expressed in terms of anticipated activity during the budget period):
 - Product A — 18 days' sales
 - Product B — 22 days' sales
 - Raw material — 12 days' consumption

Other assumptions

- Production is planned to meet budgeted sales and to build up / run down stocks to the closing targets stated above.
- Sales and production occur evenly over the budget period (i.e., the daily demand pattern is smooth).

Required

PREPARE the following budgets for the next period showing quantities and values:

1. Material purchases budget.
2. Wages budget for direct workers **(10 Marks)**

(b) EXPLAIN the treatment of following items in cost sheet.

- (i) Credit for Recoveries
- (ii) Packing Cost (primary)
- (iii) Joint Products and By-Products Cost
- (iv) Quality Control Cost **(4 Marks)**

6. (a) Why is it necessary to reconcile the Profits between the Cost Accounts and Financial Accounts? **(5 Marks)**

(b) DISCUSS the essential features of a good cost accounting system? **(5 Marks)**

(c) Pinky Ltd. Produces product A in batches; management of Pinky Ltd. wants to know the number of batches of product A to be produced where the cost incurred on batch setup and carrying cost of production is at optimum level. EXPLAIN.

(4 Marks)

OR

(c) EXPLAIN Single and Multiple Overhead Rates. **(4 Marks)**