

Mock Test Paper - Series II: April, 2025

Date of Paper: 3rd April, 2025

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 valued.

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

Company Rontomax maintains its accounts in Delhi head office. All the records of Rontomax are safely kept in this office only. In the 2nd quarter Delhi office went under repair. Thus, for the 2nd quarter records were maintained in Gurugram branch office. This branch's main work is to bring business to the company and thus generally no records are maintained in this branch office.

So for 2nd quarter all the records were recorded and maintained in this Gurugram office only. At the end of 2nd quarter, fire broke out in this branch and unfortunately all the records were burned.

In the beginning of 3rd quarter a board meeting was going to be conducted and performance of 2nd quarter were to be discussed. Company secretary, Mr. Manoj, was responsible for preparing a report of performance to be presented to the board. Now he is under immense pressure as the records were burned and thus he was not able to prepare a performance report.

Manoj contacted the Delhi head office and received a copy of 1st quarter records. He also got some information through emails shared between head office and branch office. He somehow

got a lot of information but this information doesn't make any sense as it is in parts and pieces. He called out for help of Finance and cost head, Miss Bharti, who is also a Chartered accountant.

Now both of them are at task to work out this information and be able to present a summary performance report to be presented to the board in the board meeting. Data that Manoj was able to gather was:

- Rontomax garnered revenue of ₹ 80,00,000 in 1st quarter of 2023. Its tax provision expense was ₹ 4,50,000 calculated on earning before tax in the same period.
- Cost of Goods Sold (COGS) and Operating expenses in 1st quarter were Rs, 38,00,000 and ₹ 12,50,000 respectively.
- Quarterly interest expense was ₹ 1,50,000.
- Non-operating expense other than interest was ₹ 13,00,000 in the 1st quarter.
- Selling price was reduced by 8% & no. of units sold increased by 25% from 1st quarter to 2nd quarter.
- Variable cost per unit for maintaining the day-to-day business operations is 30% of variable cost per unit of producing the goods.
- EBIT per unit for 2nd quarter is ₹ 38.857 which has gone down by ₹ 8.285 from 1st quarter.

Manoj tells Bharti about the general format of questions that board asks from him, every quarter. So, they decide to find out the answers of such questions before-hand so that meeting can be conducted smoothly.

Following are those questions that they are seeking for solutions. Consider yourself as their assistant trainee and help to find these answers (MCQs 5 to 10).

1. Find out the sales amount of Quarter 2. Select the correct answer.
 - (a) ₹ 76,50,000
 - (b) ₹ 86,00,000
 - (c) ₹ 92,00,000
 - (d) ₹ 96,50,000
2. What is the total variable cost & fixed cost in quarter 1 as per marginal costing income statement, respectively?
 - (a) ₹ 49,40,000 & ₹ 1,10,000
 - (b) ₹ 3,26,000 & ₹ 17,90,000
 - (c) ₹ 17,90,000 & ₹ 3,26,000

- (d) ₹ 4,94,000 & ₹ 11,10,000
3. If Fixed cost & total variable cost as per marginal costing doesn't change, what is the cost change in 2nd quarter?
- (a) Operating expenses increased by ₹ 11,50,000
(b) Non-operating expense decreased by ₹ 11,50,000
(c) Operating expenses decreased by ₹ 11,50,000
(d) Non-operating expenses increased by ₹ 11,50,000
4. If operating fixed cost, total variable cost, & interest cost remains same in quarter 2, what is the tax provision for 2nd quarter?
- (a) ₹ 4,65,000
(b) ₹ 4,75,000
(c) ₹ 4,85,000
(d) ₹ 4,45,000
5. What is the amount of profit excluding non-operating expenses in quarter 2?
- (a) ₹ 38,50,000
(b) ₹ 36,50,000
(c) ₹ 41,50,000
(d) ₹ 29,50,000
- (5 x 2 = 10 Marks)**

Case Scenario 2

ABC Transport Services Pvt. Ltd. is a private bus company renowned for providing reliable and comfortable intercity passenger services. The company operates a fleet of buses that connect two major cities, Mumbai and Pune, which are 150 kilometers apart. By ensuring timely and efficient services, ABC Transport Services has become a preferred choice for travelers commuting between these two bustling cities.

Fleet and Operations

The company operates a total of 10 buses, each designed for optimal comfort and safety. Every bus in the fleet has a seating capacity of 50 passengers, equipped with modern amenities to enhance the travel experience. The buses adhere to strict maintenance schedules to ensure safety and reliability on the road. The company operates multiple trips daily to accommodate the high demand for travel between Mumbai and Pune. The buses normally operate at 80% capacity.

Cost Data:

| Cost Category | Amount (₹) |
|---|-------------------|
| <u>Fixed Costs (per month)</u> | |
| Insurance | 2,00,000 |
| License Fees | 50,000 |
| Salaries to Driver and Conductor | 5,00,000 |
| Garage Rent | 1,00,000 |
| Depreciation | 3,00,000 |
| Administration Expenses | 1,50,000 |
| <u>Variable Costs (per kilometer)</u> | |
| Fuel | ₹ 35 per km |
| Lubricants and Oils | ₹ 5 per km |
| Wages per bus (additional per trip) | ₹ 10,000 per trip |
| <u>Operational Data</u> | |
| Number of round trips per bus in this month | 20 trips |
| Average occupancy rate | 80% |

Additional Info:

In the past few months, the repairs and maintenance costs for ABC Transport Services Pvt. Ltd. have shown some variability due to fluctuating operational conditions. For instance, in April, the total repairs & maintenance costs amounted to ₹ 1,40,000, with the company reporting 18 trips per bus. In May, these costs increased to ₹ 1,60,000 due to additional maintenance activities and 22 trips per bus.

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

6. Calculate the cost per trip per bus.
- (a) ₹ 21,750
 - (b) ₹ 29,250
 - (c) ₹ 23,450
 - (d) ₹ 28,250

7. Determine the total cost of operating one bus for a month.
- (a) ₹ 5,20,000
 - (b) ₹ 4,45,000
 - (c) ₹ 6,10,000
 - (d) ₹ 5,85,000
8. What is the monthly revenue if each ticket is priced at ₹1,000 per trip?
- (a) ₹ 90,00,000
 - (b) ₹ 1,00,00,000
 - (c) ₹ 80,00,000
 - (d) ₹ 75,00,000
9. Calculate the break-even number of passengers per trip if the ticket price is ₹635.
- (a) 44 passengers
 - (b) 49 passengers
 - (c) 47 passengers
 - (d) 50 passengers
10. Calculate the cost per passenger-kilometer.
- (a) ₹ 2.438
 - (b) ₹ 4.88
 - (c) ₹ 3.75
 - (d) ₹ 5.25
- (5 x 2 = 10 Marks)**
11. The following figures are extracted from the books of a company:
- Budgeted overheads ₹ 20,000 (Fixed ₹ 12,000, Variable ₹ 8,000)
- Budgeted output 2,500 units
- Actual Overheads ₹ 21,800 (Fixed ₹ 11,800, Variable ₹ 10,000)
- Actual output 3000
- Variable Overheads and fixed overheads cost variance will be:
- (a) 400 (A) and 2600 (F)

- (b) 400 (A) and 200 (F)
- (c) 2000 (A) and 200 (F)
- (d) 2000 (F) and 200 (A) **(2 Marks)**

12. Pre-determined factory overhead rate was ₹ 15 per labour hour. Actual labour hour worked 60,000. Actual factory overhead was ₹ 11,00,000 however it includes ₹ 26,000 being the wages paid for strike period and overtime wages amounting to ₹ 9,000. It was observed that 2/3 of the under absorbed were due to inflation and rest were due to faulty planning. The amount of over/under absorbed factory overhead transferred to costing P&L will be:

- (a) 58,000 under-absorbed
- (b) 55,000 over-absorbed
- (c) 58,000 over-absorbed
- (d) 55,000 under-absorbed **(2 Marks)**

13. PG Ferry services Pvt Ltd. provide ferry services between two towns. Distance one way is 18.52 nautical miles. Seating capacity of a ferry is 125 passengers. Actual passengers carried in each trip is 80% of seating capacity. Ferry run on all days of month (30 days). Ferry makes a round trips in a day. company is expecting a monthly revenue of ₹ 55,56,000. Calculate fare to be charged from a passenger for round trip.

- (a) 100
- (b) 926
- (c) 1852
- (d) 50.95 **(2 Marks)**

14. A firm introduced 3,000 units of material in the manufacturing process. During the period 2,500 units were completed and transferred to next process. However, the degree of completion on remaining 500 units was 100%, 60%, and 30% for materials, labour and overheads respectively. Which one of the following is the equivalent complete units with regard to labour?

- (a) 2,500
- (b) 2,800
- (c) 2,650
- (d) 2,500 **(2 Marks)**

15. Production set up costs ₹ 3,50,000; Total production is 50,000 units of each of the products X and Y; Production in each run is 2,000 units of X or 5,000 units of Y. Company uses activity-based costing to calculate the unit cost of its products. Set-up cost per unit of Y will be
- (a) ₹ 4.00
(b) ₹ 2.40
(c) ₹ 2.00
(d) ₹ 3.60
- (2 Marks)**

PART-II – Descriptive Questions (70 Marks)

Question No. 1 is compulsory.

*Attempt any **four** questions out of the remaining **five** questions.*

1. (a) Aditya Ltd. has a monthly requirement for an item of raw material is 1,000 units. The purchase price per unit of material is ₹60. The cost of processing an order is ₹ 540 and the carrying cost is 20%. There is a single supplier for the material which offers quantity discounts as under:

| Order Quantity (in units) | Price per unit (₹) |
|---------------------------------------|--------------------|
| Less than 2,000 units | 60.00 |
| 2,000 units and less than 4,000 units | 59.80 |
| 4,000 units and less than 6,000 units | 59.50 |
| 6,000 units and less than 8,000 units | 58.90 |
| 8,000 units and above | 58.40 |

The company uses the cash credit facility provided by the company's banker to finance its raw material purchase. The bank due to its own infrastructural constraint, can accommodate a maximum of five fund transfer (NEFT/ RTGS) requests for any single beneficiary per annum. The company in short term is unable to arrange any other source of finance.

Required:

- (i) CALCULATE the optimum purchase order size for the company;
(ii) CALCULATE the order level where the company could have minimised its total cost;

- (iii) The amount of loss that the company has to bear due to bank's inability to process fund transfer requests. **(5 Marks)**
- (b) A company has 120 direct labourers. Each labourer is paid ₹ 800 per 40 hour week. Owing to customer demands and timelines, Overtime is resorted to a maximum of 30 hours per week compensated at the weekly time rate with a premium of 50% over the regular wage. The current output works out to 6 units per man hour which is the standard output. The introduction of an incentive scheme could enhance productivity to 8 units per man hour. However, the incentive scheme if introduced would not have an overtime policy in place for extra hours worked. Budgeted weekly production is 38,400 units. The selling price is ₹ 22 per unit and direct costs other than labour is ₹ 16 per unit. The variable overheads is ₹ 1 per labour hour and Fixed overhead is ₹ 18,000 per week. PREPARE a statement to demonstrate the effect of shifting from an overtime policy to:
- (i) Halsey Incentive Scheme
- (ii) Rowan Incentive Scheme **(5 Marks)**
- (c) A company having a factory in Chennai has a 8 machineries in the process of manufacture. The company has purchased a new machinery costing ₹ 19,05,000 with a useful life of 12 years and a salvage value of ₹ 1,05,000 at the end of its useful life. The following data are as follows:
- (i) The factory works for 324 days a year with 8 hours shift daily. Plant maintenance of 300 hours and set up of 92 hours are included in the above.
- (ii) Estimated cost of maintenance of a machine is ₹ 37,500 per annum.
- (iii) Operators wages amounts to ₹ 3,630 per week with additional benefits of 15%. 4 Operators are required to operate the machinery.
- (iv) Electricity consumed during production is 16 units per hour at a cost of ₹ 4.5 per unit. No power is consumed during maintenance and set up.
- (v) General overheads allocated amounts to 75,000 upto the prior year is expected to increase by 10% during the current year.
- (vi) Special performance chemical at ₹ 600 for every 6 days of operation.
- DETERMINE Machine hour rate if set up time is (a) productive (b) unproductive. **(4 Marks)**

2. (a) The following information is made available:
- Opening stock of Work in progress – ₹ 60,000
Opening Raw Materials – ₹ 1,20,000
Opening Finished Goods – ₹ 1,13,250
Purchase of Materials – ₹ 7,50,000
Indirect manufacturing costs – 40% of conversion costs
Sales Revenue – ₹ 22,50,000
Direct Labour – ₹ 6,66,750
Prime Costs – ₹ 11,93,250
Gross margin – 30% of revenue
Cost of goods available for sale – ₹ 16,67,325
- From the above DETERMINE the following:
- Closing Raw Materials
 - Closing Work in progress
 - Closing Finished Goods. **(6 Marks)**
- (b) The following is the summarised Trading and Profit and Loss Account of XYZ Ltd. for the year ended 31st March 2024:

| Particulars | Amount (₹) | Particulars | Amount (₹) |
|------------------------------------|---------------|-------------------------------|---------------|
| Direct Material | 14,16,000 | Sales (30,000 units) | 30,00,000 |
| Direct wages | 7,42,000 | Finished stock (2,000 units) | 1,67,500 |
| Works overheads | 4,26,000 | Work-in-progress: | |
| Administration overheads | 1,50,000 | - Materials 34,000 | |
| | | - Wages 16,000 | |
| Selling and distribution overheads | 1,65,000 | - Works overhead <u>4,000</u> | 54,000 |
| Net profit for the year | 3,22,500 | | |
| | 32,21,500 | | 32,21,500 |

The company's cost records show that in course of manufacturing a standard unit
(i) works overheads have been charged @ 20% on prime cost, (ii) administration

overheads are related with production activities and are recovered at ₹5 per finished unit, and (iii) selling and distribution overheads are recovered at ₹6 per unit sold.

You are required to PREPARE:

- (i) Costing Profit and Loss Account indicating the net profits,
- (ii) A Statement showing reconciliation between profit as disclosed by the Cost Accounts and Financial Accounts. **(8 Marks)**

3. (a) The details corresponding to the manufacture of a product X is as follows:

Materials 20 units @ ₹ 3 per unit – ₹ 60

Wages 10 hours @ 16 per hour – ₹ 160

Production OH 10 hours @ 20 – ₹ 200

Actual Material cost amounts to ₹ 25,740 and labour cost amounts to ₹ 65,368.

The variances have been analysed and the following information is being made available:

- | | | |
|----|-------------------------|---------|
| 1. | Material Price Variance | - 1170A |
| 2. | Material Usage Variance | - 750F |
| 3. | Wages Rate Variance | - 1352F |
| 4. | Wages Efficiency | - 800A |
| 5. | POH Expenditure | - 900F |
| 6. | POH Volume Variance | - 1400F |

From the above DETERMINE:

- i. Actual output in Units
- ii. Actual price of material per unit
- iii. Actual quantity of materials consumed
- iv. Actual wage rate
- v. Actual hours worked and Standard Hours
- vi. Amount of overhead absorbed
- vii. Amount of Overhead incurred
- viii. Production Overhead capacity variance

ix. Production Overhead efficiency variance

x. Budgeted output in units.

(10 Marks)

(b) EXPLAIN the treatment of given items of Cost in Cost Sheet/Statement

(i) Abnormal costs

(ii) Subsidy/Grant/Incentives

(iii) Penalty, fine, damages, and demurrage

(iv) Interest and other finance costs

(4 Marks)

4. (a) A factory uses job costing system. The following data are obtained from its books for the year ended 31st March, 2025:

| | Amount (₹) |
|------------------------------------|------------|
| Direct materials | 18,00,000 |
| Direct wages | 15,00,000 |
| Selling and distribution overheads | 10,50,000 |
| Administration overheads | 8,40,000 |
| Factory overheads | 9,00,000 |
| Profit | 12,18,000 |

(i) PREPARE a Job Cost sheet indicating the Prime cost, Cost of Production, Cost of sales and the Sales value.

(ii) In 2025-26, the factory received an order for a job. It is estimated that direct materials required will be ₹ 4,80,000 and direct labour will cost ₹ 3,00,000. DETERMINE what should be the price for the job if factory intends to earn the same rate of profit on sales assuming that the selling and distribution overheads have gone up by 15%. The factory overheads is recovered as percentage of wages paid, whereas, other overheads as a percentage of cost of production, based on cost rates prevailing in the previous year.

(6 Marks)

(b) H-2025 Ltd. is a manufacturer of a range of goods. The cost structure of its different products is as follows:

| Particulars | Product | Product | Product | ₹/u |
|------------------|---------|---------|---------|-----|
| | A | B | C | |
| Direct Materials | 50 | 40 | 40 | |

| | | | | |
|----------------------------|--------|--------|--------|-------|
| Direct Labour @ ₹ 10/ hour | 30 | 40 | 50 | ₹/u |
| Production Overheads | 30 | 40 | 50 | ₹/u |
| Total Cost | 110 | 120 | 140 | ₹/u |
| Quantity Produced | 10,000 | 20,000 | 30,000 | Units |

H-2025 Ltd. was absorbing overheads on the basis of direct labour hours. A newly appointed management accountant has suggested that the company should introduce 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 Setup | Number of Setups | 12,00,000 |

The following information is also supplied:

| Details | Product A | Product B | Product C |
|------------------------------|-----------|-----------|-----------|
| No. of Setups | 360 | 390 | 450 |
| No. of Orders Executed | 180 | 270 | 300 |
| No. of Production Runs | 750 | 1,050 | 1,200 |
| No. of Purchase Requisitions | 300 | 450 | 500 |

Required

CALCULATE activity based production cost of all the three products. **(6 Marks)**

(c) EXPLAIN how would you treat the idle capacity costs in Cost Accounts.

(2 Marks)

5. (a) In a chemical manufacturing company, three products A, B and C emerge at a single split off stage in department P. Product A is further processed in department Q, product B in department R and product C in department S. There is no loss in further Processing of any of the three products. The cost data for a month are as under:

| | |
|--|-------------|
| Cost of raw materials introduced in department P | ₹ 12,68,800 |
| Direct Wages Department | (₹) |
| P | 3,84,000 |
| Q | 96,000 |
| R | 64,000 |
| S | 36,000 |

Factory overheads of ₹ 4,64,000 are to be apportioned to the departments on direct wage basis.

During the month under reference, the company sold all three products after processing them further as under:

| Products | A | B | C |
|---------------------------|--------|--------|--------|
| Output sold (kg.) | 44,000 | 40,000 | 20,000 |
| Selling Price per kg. (₹) | 32 | 24 | 16 |

There is no opening or closing stocks. If these products were sold at the split off stage, that is, without further processing, the selling prices would have been ₹ 20, ₹ 22 and ₹ 10 each per kg respectively for A, B and C.

Required:

- (i) PREPARE a statement showing the apportionment of joint costs to joint products.
 - (ii) PRESENT a statement showing product-wise and total profit for the month under reference as per the company's current processing policy.
 - (iii) WHAT processing decision should have been taken to improve the profitability of the company?
 - (iv) CALCULATE the product-wise and total profit arising from your recommendation in (iii) above. **(8 Marks)**
- (b) Bricks & Cement Pvt. Ltd. is a building supplies company offering a wide range of materials like bricks, cement, and aggregates to both trade professionals and private customers. The company focuses on providing high-quality products and reliable service for all type of construction projects.

The management provides the following budgeted data for each of the six months in the first half of the year:

| Particulars | April (₹) | May (₹) | June (₹) | July (₹) | August (₹) | September (₹) |
|------------------|--------------|------------|-------------|-------------|---------------|------------------|
| Credit sales | 22,50,000 | 22,50,000 | 22,50,000 | 23,40,000 | 23,40,000 | 25,20,000 |
| Cash sales | 5,40,000 | 5,40,000 | 5,85,000 | 6,75,000 | 7,20,000 | 8,10,000 |
| Credit purchases | 15,30,000 | 16,20,000 | 16,20,000 | 18,00,000 | 18,00,000 | 18,00,000 |

| | | | | | | |
|--|----------|----------|----------|-----------|-----------|-----------|
| Other operating costs (excluding depreciation) | 8,10,000 | 8,10,000 | 8,10,000 | 10,98,000 | 11,07,000 | 11,07,000 |
|--|----------|----------|----------|-----------|-----------|-----------|

Following table shows the distribution of payments received against credit sales:

| Value of credit sales | Payment received |
|-----------------------|---------------------------|
| 80% | One month after sale |
| 10% | Two months after sale |
| 8% | Three months after sale |
| Balance | Written off as a bad debt |

However, credit purchases are paid in the following manner:

| Value of credit purchases | Payment made |
|---------------------------|---------------------------|
| 75% | One month after purchase |
| Balance | Two months after purchase |

Any remaining operational costs, including overheads, utilities, and day-to-day expenses, are paid in the month they are incurred. This ensures that all routine expenses are settled promptly without delay, maintaining smooth financial operations throughout the period.

During the month of July, the company has also placed an order for four pallet jacks that will cost around ₹ 2,25,000 each, the payment of which is divided into four equal instalments following the month of purchase.

The cash balance at the beginning of 2nd quarter is projected to be ₹ 1,35,000.

You are required to PREPARE a cash budget for each of the three months of 2nd Quarter. **(6 Marks)**

6. (a) ENUMERATE the factors which are to be considered before installing a system of cost accounting in a manufacturing organization. **(5 Marks)**
- (b) EXPLAIN the difference between Bill of Materials and Material Requisition Note. **(5 Marks)**
- (c) EXPLAIN the meaning of Idle time and SHOW the treatment for the following causes of Idle time.

| Causes | Treatment |
|---|------------------|
| 1. The time lost between factory gate and the place of work, | |
| 2. The interval between one job and another, | |
| 3. Idle time may also arise due to abnormal factors like lack of coordination | |
| 4. Power failure, Breakdown of machines | |

(4 Marks)

OR

- (c) ABC Ltd., a mid-sized manufacturing company, has been facing frequent cost overruns and profit fluctuations over the past year. The management is considering implementing a Budgetary Control System to improve financial planning and operational efficiency.

As a financial consultant, you have been asked to IDENTIFY any EXPLAIN at least four key objectives of a Budgetary Control System that would benefit ABC Ltd.

(4 Marks)