

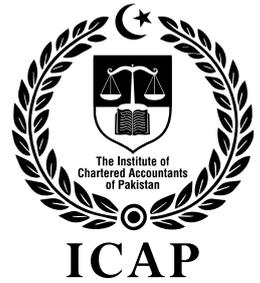
Certificate in Accounting and Finance Stage Examination

Management Accounting

5 March 2026

100 marks

3 hours and 15 minutes (including 15 minutes' reading time)



Instructions to examinees:

- (i) Answer all **NINE** questions.
- (ii) Answer in **black** pen only.
- (iii) Use the first page of the answer script to answer the Multiple-Choice Questions.

SECTION A

QUESTION 1

Select the most appropriate answer from the options provided for each of the following Multiple-Choice Questions.

- (i) Which of the following costs should **NOT** be included in the cost of finished goods of a manufacturer?
- (a) Packing material consumed in production
 - (b) Fire insurance of raw materials
 - (c) Fuel cost for transporting staff between work sites during production
 - (d) Insurance of finished goods held for distribution purposes
- (01 mark)**

- (ii) Consider the following journal entry:
- **Debit:** Profit and Loss Account
 - **Credit:** Work-in-Process (WIP) Account

In which of the following situations would this journal entry be recorded?

- (a) Normal loss
- (b) Abnormal loss
- (c) Completion of a job
- (d) Under-absorption of overheads

(01 mark)

- (iii) An increase in safety stock is most likely to result in an increase in:

- (a) ordering costs
- (b) stock-out costs
- (c) lead time
- (d) holding costs

(01 mark)

- (iv) Which of the following statements is **NOT** correct with respect to the assumptions of Cost-Volume-Profit (CVP) analysis?

- (a) Fixed costs are normally assumed to remain unchanged at all levels of output at least in the short term
 - (b) The contribution per unit varies for each unit sold of the same product
 - (c) The selling price per unit remains constant
 - (d) Production volume equals to sales volume
- (01 mark)**

- (v) A company has signed a contract to supply 42 identical machines. The production data are as follows:

- The first machine requires 100 labour hours.
- Labour hours are subject to an 80% learning curve.
- The learning curve factor for an 80% learning curve effect is -0.3219 .

Calculate the total labour hours required to produce 42 machines.

- (a) 3,360 hours
- (b) 1,261 hours
- (c) 953 hours
- (d) 400 hours

(1.5 marks)

(vi) Alpha Limited imported a consignment from the USA with the following details:

	Product A	Product B	Total
Quantity (units)	20,000	30,000	50,000
Weight per unit (kg)	2	4	
Total C&F value (Rs.)	400,000	600,000	1,000,000
Custom duty (Rs.)			200,000
Income tax (adjustable) (Rs.)			110,000
Transportation from port to factory (Rs.)			168,000

Additional information:

- Customs duty and income tax for product A and product B are calculated based on the C&F value of each product.
- Transportation cost is apportioned based on the total weight of the products.

Determine the cost per unit of product A.

- (a) Rs. 26.1 (b) Rs. 26.8 (c) Rs. 28.3 (d) Rs. 29.0

(02 marks)

(vii) Beta Limited produces two joint products, X and Y, from a single production process. Joint production costs are allocated using the net realizable value method at the split-off point. Product X is sold at the split-off point, whereas product Y undergoes further processing to produce product Z.

The following data relates to February 2026:

Total joint production cost	Rs. 428 million
Product X	40,000 kg produced and sold at Rs. 10,000 per kg
Product Y	60,000 kg produced and further processed
Further processing costs	Rs. 3,000 per kg of product Z
Product Z	57,000 kg produced and sold at Rs. 11,000 per kg
Normal loss during further processing	3,000 kg having nil value

What is the cost per kg of product X?

- (a) Rs. 4,167 (b) Rs. 4,280 (c) Rs. 4,864 (d) Rs. 5,000

(2.5 marks)

QUESTION 2

Zaffre Industries Limited (ZIL) produces and sells a single product, A5, using raw material, X10. The following information has been extracted from ZIL's budget for the upcoming year.

- (i) The total sales of product A5 are estimated at Rs. 360 million, with a selling price of Rs. 1,000 per kg.
- (ii) The purchase price of raw material X10 is estimated at Rs. 380 per kg. Each kg of raw material X10 yields 0.9 kg of product A5, resulting in a normal loss of 0.1 kg of input.
- (iii) The cost of financing the purchase price of inventory is 10% per annum.
- (iv) Raw material X10 is stored in a public warehouse that charges Re. 1 per kg per month, along with a fixed storage charge of Rs. 12,000 per month.
- (v) ZIL incurs a variable transportation cost of Rs. 10 per kg and a fixed delivery charges of Rs. 15,000 per consignment.
- (vi) The variable costs of the procurement department are estimated at Rs. 10,000 per order.
- (vii) ZIL maintains a safety stock of 15,000 kg of raw material X10.

Required:

Compute the Economic Order Quantity (EOQ) for raw material X10.

(06 marks)

QUESTION 3

Magenta Industries Limited (MIL) manufactures two products, A and B. Management is currently considering the introduction of a new product, C, in the next year. The following information has been extracted from MIL's budget for the next year related to products A and B:

	A	B	Total
	----- Rs. in million -----		
Sales	500	680	1,180
Total variable costs	(400)	(480)	(880)
Contribution margin	100	200	300

The following information is available in respect of the above budgeted figures:

- Labour is paid at a normal wage rate of Rs. 200 per hour, representing 10% of total variable costs.
- Variable overheads are Rs. 600 per labour hour and apply to all hours worked.

The following estimates relate specifically to product C:

- (i) Sales of product C are estimated at 2 million kg, at a selling price of Rs. 190 per kg. Introduction of product C will reduce the sales of product A by 5% and product B by 10%.
- (ii) Each kg of product C requires 1 kg of material X and is subject to a normal process loss of 3% of input.
- (iii) Conversion of material X into product C would require 0.05 labour hours per kg of product C.
- (iv) MIL's normal labour capacity is 440,000 hours. Any hours worked in excess of this capacity are paid at a 50% premium. Labour hours saved from reduced production of products A and B may be utilized for product C at the normal wage rate.
- (v) 15 new supervisors will be hired at a monthly salary of Rs. 180,000 each. Apart from supervisor costs, there is no change in total fixed cost.

Required:

Determine the maximum cost per kg that MIL can incur for material X in order to achieve an increase of Rs. 40 million in total net profit for the next year. **(10 marks)**

QUESTION 4

The following is the product-wise operating result of Russet Industries Limited (RIL) for the year ended 28 February 2026:

	Product A	Product B
	----- Rs. in '000 -----	
Sales	200,000	240,000
Raw materials	(60,000)	(84,000)
Direct labour	(36,000)	(50,400)
Variable overheads	(24,000)	(33,600)
	120,000	168,000
Contribution margin	80,000	72,000
Fixed costs	(32,000)	(36,000)
Net profit	48,000	36,000

The selling price per unit is Rs. 50 for product A and Rs. 40 for product B. Each unit of product A requires 3 labour hours, while each unit of product B requires 4 labour hours.

RIL is preparing its budget for the year ending 28 February 2027, and the following projections have been made:

- (i) The selling price of product B will be increased by 15% in 2026-2027. However, due to this price increase, sales volume of product B is expected to decrease by 5%.
- (ii) Due to market competition, the selling price of product A can be increased by only 2%. However, the labour hours saved as a result of the reduced production of product B will be fully utilized to manufacture additional units of product A.
- (iii) The cost of raw materials will increase by 2% for product A and 5% for product B. Labour wages will increase by 5%. Variable overheads and fixed costs are expected to increase by 10%.

RIL does not maintain any opening or closing inventory.

Required:

Based on 2026-27 projections, compute the break-even sales amount and the margin of safety percentage. **(10 marks)**

QUESTION 5

Weldon Limited (WL) produces two products A10 and B20. Each product passes through three production departments: P, Q and R. All three departments are supported by two service departments: Repairs and Maintenance Department (RMD) and Quality Control Department (QCD).

During the next year, WL's budgeted production is 25,000 units of A10 and 30,000 units of B20. The budgeted factory overheads for the next year are as follows:

	Rs. in '000
Electricity and power	4,000
Depreciation	2,500
Indirect labour	1,500
Other overheads	800

The following data has been gathered for the purpose of allocation and apportionment of overheads:

	P	Q	R	RMD	QCD
Machine hours per unit – A10	8	5	3		
Machine hours per unit – B 20	6	4	2		
Area (sq. ft.)	1,800	1,200	1,000	200	800
Basis of apportioning costs of RMD	40%	30%	20%		10%
Basis of apportioning costs of QCD	50%	20%	10%	20%	

Additional information:

- (i) 90% of the electricity and power is consumed by the production departments, 4% by RMD and 6% by QCD.
- (ii) 70% of the depreciation pertains to machines and 30% relates to factory building.
- (iii) 60% of the indirect labour is used by QCD, 25% by RMD and 5% by each production department.
- (iv) Other overheads are to be apportioned to production departments at 25% each and to service departments at 12.5% each.
- (v) WL uses simultaneous equation method for apportioning service departments' cost to production departments.

Required:

Based on above information, compute the factory overheads of each production department. **(09 marks)**

QUESTION 6

Damask Limited (DL) manufactures two products: N5 and O7. The following information relates to the year ended 28 February 2026.

	N5	O7
Opening inventory:		
▪ Units	40,000	60,000
▪ Cost (Rs. in '000)	172,000	318,000
Production (units)	150,000	190,000
Costs of goods produced (Rs. in '000)	750,000	1,140,000
Closing inventory (units)	50,000	70,000
Damaged units included in closing inventory	500	600
Selling price per good unit (Rs.)	5,100	6,800
Total variable selling costs (Rs. in '000)	49,980	24,480

Additional information:

- (i) DL uses FIFO method for inventory valuation.
- (ii) During the year-end physical inventory count, 2,000 units of N5 and 3,000 units of O7 were found to be missing and are considered abnormal. The closing inventory quantities above have not been adjusted for these shortages.
- (iii) All units sold during the year were good units.
- (iv) Effective 28 February 2026, selling prices per good unit of N5 and O7 have been increased to Rs. 5,355 and Rs. 7,140 respectively.
- (v) Variable selling costs for both good and damaged units are directly proportional to their sales values.
- (vi) After repair, damaged units can be sold at the same price as good units.
- (vii) The following information relates to damaged units:

	N5	O7
Selling price per damaged unit (Rs.)	4,000	6,500
Average repair cost per damaged unit (Rs.)	350	750

Required:

Calculate the amount of closing inventory to be reported in DL's statement of financial position as at 28 February 2026. **(09 marks)**

SECTION B**QUESTION 7**

Saffron Industries Limited (SIL) is engaged in the manufacturing and sale of a single product. The following information has been extracted from SIL's records for the year ended 28 February 2026:

	Rs. in '000
Sale (25 million units)	300,000
Purchases – Raw material	85,000
Purchases – Stores & spares	8,000
Salaries – production (80% direct labour, 20% indirect labour)	80,000
Depreciation (80% production, 20% others)	20,000
Other manufacturing expenses (60% variable)	50,000
Other administrative and selling expenses (20% variable)	30,000
Raw material inventory – opening	10,000
Work-in-process (WIP) – opening	350
Finished goods – opening	14,000
Stores and spares inventory – opening	3,000

Additional information:

- (i) Closing inventories of raw material and stores & spares amounted to Rs. 11.5 million and Rs. 4.58 million, respectively.
- (ii) Opening WIP consisted of 100,000 units, which were 50% complete with respect to both raw materials and conversion costs. Closing WIP consisted of 200,000 units, which were 75% complete with respect to both raw materials and conversion costs.
- (iii) Opening and closing inventories of finished goods consisted of 2,000,000 and 3,000,000 units respectively.
- (iv) All direct labour and 70% of indirect labour are paid on an hourly basis, while the remaining indirect labour are permanently employed and paid monthly salaries.
- (v) SIL uses FIFO method for inventory valuation.
- (vi) There were no gains or losses during the production process.

Required:

Prepare SIL's profit and loss account for the year ended 28 February 2026 using marginal costing. **(13 marks)**

QUESTION 8

Crimson Enterprises Limited (CEL) manufactures a single product, A99, by assembling three components: X, Y and Z, all of which are currently produced internally. Each unit of product A99 requires 2 units of X, 4 units of Y and 5 units of Z.

The following information has been gathered by the CEL's accountant:

Statement of profit or loss (20X5)

	Rs. in '000
Sales (1,000,000 units)	1,300,000
Cost of sales:	
Cost of component X	(120,000)
Cost of component Y	(175,000)
Cost of component Z	(205,000)
Cost of assembling the components	(189,000)
	(689,000)
Gross profit	611,000
Marketing, selling and other costs (20% variable)	(380,000)
Net profit before tax	231,000

Break-up of components and their assembling costs (20X5)

	X	Y	Z	Assembly
	----- Rs. in '000 -----			
Raw material	30,000	49,000	70,000	-
Labour (Rs. 200 per hour)	40,000	56,000	60,000	84,000
Factory overheads (60% variable)	50,000	70,000	75,000	105,000
	120,000	175,000	205,000	189,000

Projections for the year 20X6 budget

Increase in selling price	4%
Impact of inflation on:	
▪ cost of raw material	5%
▪ wages of direct labour	10%
▪ fixed production overheads	6%
▪ variable production overheads	8%
▪ marketing, selling and other costs	9%

Other information:

- (i) CEL is currently operating at full labour capacity. Due to this capacity constraint, CEL's supply chain department has entered into negotiations with an external supplier who has offered to supply component X at a price of Rs. 100 per unit.
- (ii) Management believes that if component X is purchased externally, the labour hours currently used in its production can be reallocated to increase the production of other components and the assembling of product A99.

Required:

- (a) Assess whether CEL should manufacture component X internally or purchase it from external supplier. **(15 marks)**
- (b) Discuss **three** non-financial factors that CEL should consider while making the decision in part (a) above. **(03 marks)**

QUESTION 9

Indigo Dynamics Limited (IDL) uses a standard absorption costing system for its product, D-Star. The following information relates to the month of February 2026:

- (i) Budgeted production of D-Star was 21,500 units.
(ii) Standard costs per unit of D-Star are as follows:

Cost component	Standard input	Rupees
Raw material D1	2 kg	600
Raw material D2	3 kg	450
Direct labour	0.75 hour	300
Production overheads	0.75 hour	270
Total standard cost per unit		1,620

- (iii) Stock movements of materials D1 and D2 are as under:

Date	Description	D1		D2	
		kg	Cost per kg (Rs.)	kg	Cost per kg (Rs.)
1-02-2026	Opening balance	15,000	300	10,000	150
2-02-2026	Purchases	-	-	40,000	155
3-02-2026	Purchases returns	-	-	(5,000)	155
3-02-2026	Purchases	35,000	305	35,000	140
3-02-2026	Issued to production	(41,000)	-	(58,500)	-

Additional information:

- IDL follows the FIFO method for its inventory valuation.
- Production overheads are absorbed on the basis of direct labour hours. During the month, 14,500 direct labour hours were worked.
- Variable production overheads incurred during the month amounted to Rs. 4 million.
- Fixed production overheads were budgeted at Rs. 1,548,000. 30% of budgeted fixed production overheads were related to utilities. During the month, fixed utilities expense increased by 25%, whereas other fixed production overheads decreased by 5% from their budgeted amounts.
- Actual sales of D-Star were 25,000 units. Opening and closing finished goods inventory of D-Star was 11,000 and 6,000 units, respectively.

Required:

Calculate the following:

- (a) Material price, mix and yield variances **(06 marks)**
(b) Variable overheads expenditure and efficiency variances **(04 marks)**
(c) Fixed overheads expenditure, efficiency, and capacity variances **(05 marks)**

(THE END)