Certificate in Accounting and Finance Stage Examination

Management Accounting

20 August 2026
100 marks
3 hours and 15 minutes (including 15 minutes' reading time)

ICAP

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) Compared with the last year, the ordering cost per order has increased by 6%, while the annual holding cost per unit has increased by 8%. Assuming the annual demand remains unchanged, the economic order quantity (EOQ) will:

(a) increase by 1% (b) increase by 2%
(c) decrease by 1% (d) decrease by 2% **(01 mark)**

(ii) Sea Land Limited (SLL) manufactures products A and B in batches, with only one product being produced at a time. The batch sizes are 5,000 units for product A and 6,000 units for product B. The set-up cost per batch for product A is 20% higher than that for product B.

During the latest quarter, SLL produced 100,000 units of product A and 150,000 units of product B. The total set-up costs incurred during the quarter amounted to Rs. 5.39 million.

Which of the following represents the set-up costs for the latest quarter attributable to product B?

(a) Rs. 2.450 million (b) Rs. 2.695 million
(c) Rs. 2.750 million (d) Rs. 2.940 million **(1.5 mark)**

(iii) The following information has been extracted from the budget of Sierra Industries (SI) for the next year:

	Products			
	A	**B**	**C**	**D**
	------------**Rs. per unit**------------			
Selling price	100	128	160	220
Variable cost	70	84	130	180
Price offered by a local supplier	86	100	145	210
Labour hours required per unit	2	4	3	5

Due to a shortage of labour hours, SI must outsource the entire production of one of the four products to the local supplier. Which product should SI outsource to make the most cost-effective use of the limited labour hours available?

(a) Product A (b) Product B (c) Product C (d) Product D
(02 mark)

(iv) Which of the following statements regarding absorption costing and marginal costing is **NOT** correct?

(a) The cost of closing inventory under absorption costing is always greater than or equal to that under marginal costing.
(b) The cost of opening inventory under absorption costing is always greater than or equal to that under marginal costing.
(c) Profit reported under absorption costing is always greater than or equal to that under marginal costing.
(d) Sales reported under absorption costing and marginal costing are the same. **(01 mark)**

(v) A company has three production departments, A, B and C, and two service departments, Y and Z. Factory overheads have been allocated to all departments using appropriate allocation basis. The overheads of the service departments are then reapportioned to the production and service departments in the following proportions:

	Departments				
	A	**B**	**C**	**Y**	**Z**
Allocation basis of Department Y	40%	25%	20%	-	15%
Allocation basis of Department Z	50%	30%	10%	10%	

The overheads initially allocated to departments Y and Z for July 2026 are Rs. 840,000 and Rs. 960,000 respectively.

Which of the following is the total overhead of service departments Y and Z to be apportioned to Department A?

(a) Rs. 816,000
(b) Rs. 931,371
(c) Rs. 929,543
(d) Rs. 917,400 **(2.5 mark)**

(vi) Which of the following statements is **NOT** correct under marginal costing?

(a) Every additional unit of output has the same variable cost.
(b) Semi-variable costs can be separated into variable cost per unit and fixed cost per period.
(c) Inventory is valued at variable production cost only.
(d) Fixed manufacturing overhead is treated as part of the cost of each unit produced. **(01 mark)**

(vii) Which of the following is a limitation of Activity Based Costing (ABC) compared with traditional allocation method?

(a) ABC recognizes the complexity of manufacturing processes by using multiple cost drivers.
(b) ABC assigns indirect costs to products based on the activities performed.
(c) ABC may require subjective judgement when identifying activities and selecting appropriate cost drivers.
(d) ABC can be applied to all categories of overhead costs, and is not limited to production overheads. **(01 mark)**

QUESTION 2

Rocky Industries Limited manufactures specialised tools for various industries and uses a job order costing system. During July 2026, work was carried out on two jobs.

The following information relates to the jobs in progress during the month:

Particulars		**Job 101**	**Job 202**
Quantity ordered	**(Units)**	1,000	1,200
Order value	**(Rs.)**	15,000,000	18,000,000
Opening work-in-process	**(Rs.)**	4,500,000	2,500,000
Cost of material issued from store	**(Rs.)**	3,700,000	2,800,000
Direct labour hours used		5,000	9,000

Additional information:

(i) Total direct labour for the month amounted to Rs. 8.4 million. All direct workers were paid at the same hourly wage rate.

(ii) Factory overheads are absorbed using a predetermined overhead rate of Rs. 450 per direct labour hour.

(iii) Factory overheads of Rs. 6.3 million were incurred and recorded in the Factory Overhead Control Account. An analysis of these costs revealed the following:

- Indirect material amounted to Rs. 1,400,000. This included materials costing Rs. 200,000 used to repair a machine dedicated exclusively to Job 202 and materials costing Rs. 150,000 used to paint the factory building.
- Indirect labour amounted to Rs. 1,200,000, of which 10% related to a special project undertaken by the marketing department.

(iv) Job 101 was completed on 29 July 2026. Before completion, unused direct materials costing Rs. 70,000 were transferred to Job 202. During final inspection, 50 damaged units were rejected and subsequently sold for Rs. 10,000. The rejected units were treated as an abnormal loss. The remaining 950 units were transferred to finished goods store.

Required:
Prepare journal entries to record the above transactions for the month of July 2026. ***(Narrations are not required. Ignore the journal entry for under/over absorbed factory overheads)*** **(09 marks)**

QUESTION 3

Zenith Enterprises Limited manufactures a single product. The following information relating to the variance analysis for the period is available:

(i) Standard and actual data:

	Standard	**Actual**
	------ Rupees ------	
Direct labour rate per hour	350	377
Sales price per unit	4,000	4,100

(ii) Variances:

	Rupees
Favourable material price variance	2,400,000
Unfavourable material usage variance	(2,400,000)
Unfavourable labour rate variance	(513,000)
Favourable variable factory overhead efficiency variance	510,000
Favourable sales price variance	1,100,000

Additional information:

- Actual material quantity used was 120,000 kg, which was 10,000 kg more than the standard material quantity allowed for actual production.
- Actual direct labour hours worked were 3,000 hours less than the standard direct labour hours allowed for actual production.
- Standard fixed factory overhead is Rs. 100 per unit.
- Actual sales volume exceeded the budgeted sales volume by 1,000 units.
- There were no opening or closing inventories.

Required:
Based on the available information, compute each of the following:

- Standard and actual material prices per kg
- Standard direct labour hours allowed for actual production
- Standard variable factory overhead per unit
- Sales volume profit variance **(10 marks)**

QUESTION 4

Andean Industrial Enterprises manufactures two products, A and B. The following information relates to their production during the year ended 30 June 2026:

	Product A		Product B	
	Budget	**Actual**	**Budget**	**Actual**
Production units	40,000	41,600	60,000	64,000
Direct labour hours per unit	1.35	1.25	0.95	1.00

Additional information:

(i) Factory overheads have been applied using a pre-determined overhead absorption rate of Rs. 500 per direct labour hour, applied to actual labour hours.

(ii) Actual factory overheads incurred during the year amounted to Rs. 59.5 million.

(iii) There were no opening or closing inventories.

Required:
Compute the total budgeted factory overheads and the amount of under/over applied factory overheads for the year ended 30 June 2026. Also prepare the journal entry to record the under/over applied factory overheads. **(05 marks)**

QUESTION 5

Jebel Furniture Limited (JFL) manufactures customised office furniture. Its manufacturing and administrative activities are carried out on the same factory premises. The following information relates to the year ended 30 June 2026:

	Rs. in '000
Purchases of wood and timber – direct material	129,600
Purchases of hardware, polish and glue – indirect material	5,800
Freight-in on direct and indirect materials	7,200
Rent expense	14,400
Salaries of carpenters and machine operators	16,800
Salaries of factory supervisors	4,800
Salaries of administrative and sales staff	7,200
Utility expense	17,000
Other fixed overheads	9,600

Additional information:

(i) Freight-in is allocated between direct and indirect materials based on their relative weight. Purchases comprised 180,000 kg of wood and timber and 60,000 kg of hardware, polish and glue.

(ii) Rent expense is allocated based on the floor area occupied by each section of the factory premises. The total floor area is 20,000 square feet comprises the production floor (60%), direct material store (15%), finished goods warehouse (10%), administrative offices (10%), and indirect material store (5%).

(iii) Utility expense is allocated between the production floor and administrative offices in the ratio of 90% and 10%, respectively.

(iv) Other fixed overheads are allocated between manufacturing and administration in the ratio of 80% and 20%, respectively.

(v) Inventory balances were as follows:

	Opening	**Closing**
	--------- **Rs. in '000** ---------	
Direct materials	14,400	18,000
Indirect materials	1,200	1,800
Work-in-process	9,600	11,400
Finished goods	13,200	15,600

Required:
Prepare JFL's statement of cost of goods manufactured for the year ended 30 June 2026. **(07 marks)**

QUESTION 6

Karakoram Auto Components Limited (KACL) has been approached by Northcrest Motors Limited (NML), a manufacturer of luxury automobiles, to manufacture and supply 7,200 luxury vehicle seats at a price of Rs. 50,000 per seat. It is the policy of KACL to accept only those orders that are expected to generate a contribution margin of at least 30%.

Estimates provided by KACL's technical department:

(i) Production will be undertaken in batches of 1,200 seats per batch.

(ii) The estimated variable costs per seat in the first batch is as follows:

	Rupees
Raw materials	21,000
Direct labour (10 hours at Rs. 600 per hour)	6,000
Variable overheads (Rs. 1,000 per labour hour)	10,000
	37,000

(iii) The raw materials cost for the first batch includes wastage equivalent to 5% of the cost of raw materials required for production before allowing for wastage. Based on past experience, the wastage rate for each subsequent batch is expected to be 10% lower than that of the immediately preceding batch. The wastage rate applicable to the fourth batch will remain unchanged for all subsequent batches.

(iv) Direct labour hours are expected to follow a 90% learning curve. The labour time per unit applicable to the fifth batch will remain unchanged for the sixth batch.

Required:
Determine whether KACL should accept the order from NML, based on its minimum required contribution margin. ***The learning curve index for a 90% learning curve is –0.152.*** **(08 marks)**

SECTION B

QUESTION 7

Alpine Edibles Limited manufactures and sells two principal products: A and Z. Its production process comprises two departments, as described below:

Department I: Various raw materials are processed jointly to manufacture products A and B, along with a by-product, product C.

Department II: The entire output of product B is transferred to department II, where it is blended with product A and an additional input, raw material R to manufacture product Z. Product A, product B, and raw material R are used in the ratio of 3:4:1, respectively. Any remaining quantity of product A not utilized in department II is sold directly in the market.

The following information relates to July 2026:

(i) In Department I, 250,000 kg of raw materials costing Rs. 30 million were processed, resulting in the production of 115,000 kg of product A, 92,000 kg of product B and 23,000 kg of product C.

(ii) The entire production of product B, together with the required quantities of product A and raw material R, was processed in department II. The process yielded 170,000 kg of product Z.

(iii) Direct labour costs incurred in departments I and II amounted to Rs. 3,246,000 and Rs. 4,472,000, respectively. Total factory overheads of Rs. 13,200,000 are allocated between the two departments based on of direct labour hours.

(iv) There were no opening inventories. Closing inventories of products A and Z were 10,000 kg and 30,000 kg, respectively. There was no closing work in process.

Additional information:

(i) Raw material R costs Rs. 100 per kg.

(ii) Direct labour is paid at Rs. 600 per hour in department I and Rs. 800 per hour in department II.

(iii) Joint costs are allocated between products A and B based on their net realisable values at the split-off point. Proceeds from the sale of by-product C are credited to the cost of department I.

(iv) The selling prices of products A and Z are Rs. 300 and Rs. 400 per kg, respectively. The entire output of by-product C was sold for Rs. 2,162,000 during the month of July 2026.

(v) Any losses are treated as normal losses and have no recoverable value.

Required:
Compute the cost of closing inventories of products A and Z as at 31 July 2026. **(15 marks)**

QUESTION 8

Highland Industries Limited (HIL) produces two types of a certain product, Standard and Premium. Its statement of profit or loss for the year ended 31 December 20X6 is as follows:

	Rs. in '000
Sales	96,000
Cost of sales:	
Raw materials	(44,000)
Direct labour	(10,000)
Factory overheads	(20,000)
	(74,000)
Gross profit	**22,000**
Operating expenses	(12,000)
Operating profit	**10,000**

Additional information:

(i) Equal quantities of standard and premium were produced and sold in 20X6. Sales of standard and premium are expected to increase by 5% and 8%, respectively, in 20X7.

(ii) The selling prices of standard and premium in 20X6 were Rs. 140,000 and Rs. 180,000 per unit, respectively. HIL plans to increase the selling prices of each product by 10% in 20X7.

(iii) The raw material cost per unit of premium is 20% higher than that of standard. The difference represents the cost of a special material used exclusively in premium. All other raw materials used in both types of products are identical.

The cost of all raw materials other than the special material is expected to increase by 6% in 20X7, whereas the cost of the special material is expected to increase by 25%.

(iv) Direct labour hours per unit are the same for the standard and premium. HIL plans to increase wage rates by 20% in 20X7. However, training provided by the production manager as part of his normal duties at the end of 20X6 is expected to reduce direct labour hours per unit by 10% in 20X7.

(v) 60% of total factory overheads represented fixed costs in 20X6. All factory overheads are expected to increase by 10% due to inflation in 20X7. In addition, variable factory overheads are expected to vary in direct proportion to changes in direct labour hours.

(vi) 20% of operating expenses represented variable costs in 20X6, and are expected to vary directly with sales revenue. All operating expenses are expected to increase by 12% due to inflation in 20X7.

(vii) There were no opening or closing inventories in 20X6, and none are expected in 20X7.

Required:
Determine the break-even sales value and the margin of safety as a percentage of budgeted sales revenue for the year ending 31 December 20X7. **(18 marks)**

QUESTION 9

Summit Industries Limited (SIL) produces two products A and B. A competitor has recently introduced an improved substitute for product A. The marketing director estimates that, unless SIL reduces the selling price of product A by 30%, its sales volume will decline by 80%. Management is reluctant to reduce the price by 30% and believes that the production and sale of product A should be discontinued, if its continued sale would result in a loss.

The following information has been extracted from SIL's recently approved budget for the next year. The budget was prepared before the competitor's product was introduced:

	Rs. in '000
Sales	151,000
Cost of sales	
Raw material – product A	(14,400)
Raw material – product B	(37,800)
Labour including overtime premium	(18,500)
Factory overheads	(30,000)
Gross profit	**50,300**
Operating expenses	(29,000)
Operating profit	**21,300**

Additional information:

(i) Budgeted sales comprised the following:

	Units	**Rs. in '000**
Product A	12,000	36,000
Product B	25,500	115,000
	37,500	**151,000**

(ii) All raw materials are purchased from the same supplier, Timberland Supply Services, which currently allows a 10% discount on the gross purchase value. If the gross purchases before discount fall below Rs. 50 million per annum, the discount on all raw materials will be reduced to 4%.

(iii) Labour is paid at the rate of Rs. 400 per hour. A premium of Rs. 100 per hour is paid for overtime. All workers are capable of performing any production-related work, and each unit of Product A or B requires the same number of labour hours.

(iv) Normal labour capacity is 40,000 hours per annum. Under the union agreement, workers cannot be terminated during the next 2 years. Idle labour must be paid at Rs. 320 per hour.

(v) 60% of the factory overheads are variable and incurred in proportion to the labour hours worked.

(vi) Operating expenses will remain unchanged under all proposed options.

(vii) Demand for product B is limited to its budgeted sales volume.

(viii) There were no opening or closing inventories.

Required:

Determine the revised operating profit under each of the following options and recommend the option that SIL should adopt:

Option 1: Continue to sell product A at the existing price.

Option 2: Reduce the selling price of product A by 30% to maintain its budgeted sales volume.

Option 3: Discontinue the production and sale of product A. **(18 marks)**

(THE END)