ICAP

Certificate in Accounting and Finance Stage Examination

4 September 2025
3 hours – 100 marks
Additional reading time – 15 minutes

Cost and Management Accounting

Instructions to examinees:
(i) Answer all **NINE** questions.
(ii) Answer in **black** pen only.

Section A

Q.1 The following is an extract from the report prepared by the cost accountant of MAS Enterprises (MAS) for the year ended 31 August 2025:

	Product A		Product B	
	Actual	**Budget**	**Actual**	**Budget**
Production **(units)**	54,000	56,000	86,000	80,000
Direct labour hours per unit	2.04	2.00	1.58	1.60
Direct labour costs **(Rs.)**	33,598,800	33,600,000	41,443,400	38,400,000

Additional information:
(i) Direct labour is required to work on machines and each machine requires 5 operators.
(ii) Production is carried out in a single shift of 10 hours.
(iii) Product A is produced on 7 machines, while product B is produced on 8 machines.
(iv) Production of product A was suspended for 12 days. Full wages were paid to all machine operators during this period. These labour hours and wages are included in the direct labour hours and costs shown above.
(v) Actual factory overheads recorded in the books amounted to Rs. 59.6 million, compared with the budget of Rs. 60 million.
(vi) MAS applies a single overhead absorption rate based on direct labour hours.

Required:
Compute the under or over-absorbed factory overheads and record the journal entry to close the same. **(06)**

Q.2 Jameel and Company Limited (JCL) is engaged in the production of a single product, A-11. Each unit of A-11 requires 2 kg of raw material X and 3 kg of raw material Y. Purchases of X and Y are made from separate suppliers in order quantities of 350,000 kg and 315,000 kg respectively.

JCL's full production capacity is 2,100,000 units of A-11, which can be sold in the market. Production takes place evenly throughout the year, except for 3 maintenance breaks of 5 days each.

The contribution margin per unit of A-11 is Rs. 10. The annual holding costs are Rs. 8 per kg for X and Rs. 9 per kg for Y.

At present, JCL maintains a safety stock of 6,000 kg and 9,000 kg of X and Y respectively. The likelihood of supply delays is as follows:

(i) Every sixth order of X is expected to be delayed by 2 days.
(ii) Every fifth order of Y is expected to be delayed by 1 day.
(iii) Once during the year, delays of both orders are expected to overlap.

It is expected that these delays do not overlap with maintenance breaks.

Required:
Determine the impact on JCL's profitability if it decides to maintain additional safety stock to ensure no stock-outs occur during the year. **(09)**

Q.3 Ostrich Industries Limited (OIL) is engaged in the manufacturing and sale of a single product, Alpha. OIL produces and sells 200,000 kg of Alpha, earning a contribution margin of Rs. 80 million with a contribution margin ratio of 40%.

OIL's production capacity is limited to 264,000 labour hours, and has been fully utilized. Labour is paid at a rate of Rs. 200 per hour. Variable overheads (inclusive of operating expenses) are 60% of the cost of labour.

OIL's research department has developed a new product, Beta, which can be obtained through further processing of Alpha. According to the market research, Beta is a high-demand product, and its entire production can be sold at a price of Rs. 1,900 per kg.

The following projections have been made regarding the production of Beta:

(i) Each kg of Alpha will be processed together with 0.2 kg of a raw material, Zed, to produce 1.1 kg of Beta. The cost of Zed is estimated at Rs. 550 per kg. The process will also generate 0.1 kg of waste material, Wee, which must be disposed of at a cost of Rs. 22 per kg.
(ii) Further processing will require 80 labour hours per 100 kg of Beta.
(iii) There is no other change in direct labour and variable overheads.

Required:
Determine the impact on the contribution margin if OIL sells only its new product Beta. **(09)**

Q.4 MI Limited (MIL) produces various products including F and G. MIL applies the weighted average method for inventory valuation.

The information provided to the external auditors in support of the draft financial statements for the year ended 31 August 2025 is as follows:

	Raw Material - R		**Finished Goods**			
			F		**G**	
	Units	**Costs (Rs.)**	**Units**	**Costs (Rs.)**	**Units**	**Costs (Rs.)**
Opening inventories	200,000	2,400,000	40,000	4,000,000	50,000	6,000,000
Purchases/Production	1,600,000	21,000,000	400,000	44,400,000	450,000	59,000,000
Closing inventories	220,000	2,860,000	42,000	4,620,000	55,000	7,150,000

The auditors were also informed that factory overheads were 60% of direct labour cost. Further, there were no opening or closing work-in-process inventories.

While reviewing the information, the auditors have identified the following errors:

(i) Rs. 526,329 incurred during the year on transportation of raw material R to the factory was erroneously charged to administration expenses. Raw material R is used in the production of product F only.
(ii) 5% of direct labour costs charged to product F was actually incurred on a special order for another product.
(iii) Closing inventory of product G includes 5,000 damaged units. These were being repaired and repair cost of Rs 100,000 was incurred before year-end and included in current year's production cost of product G. An additional cost of Rs. 56,000 will be incurred after the year-end on these units. After completion of repairs, the units are expected to be sold at Rs. 150 per unit.

Required:
Compute the revised value of closing inventories after incorporating the above adjustments. **(10)**

Q.5 Faisal and Sons (FNL) produces customised machines. It has recently received an order for supply of 50 customised machines at a selling price of Rs. 200,000 each. FNL has the option of hiring either skilled labour or semi-skilled labour for this order. However, extra cost of supervision would be incurred if semi-skilled labour is used.

The estimated cost to produce the first machine is as follows:

	Skilled labour (Rs.)		**Semi-skilled labour (Rs.)**
Raw material	50,000		55,000
Labour	40,000	**OR**	45,000
Variable overheads @ Rs 280 per labour hour	28,000		42,000
Supervisor costs (Not included in variable overheads)	-		12,000
	118,000		**154,000**

Additional information:

(i) The difference of Rs. 5,000 in raw material cost between skilled and semi-skilled labour is due to wastage. Skilled labour incurs no wastage. However, wastage by semi-skilled labour is expected to decrease by Rs. 1,000 for each successive machine till the cost of raw material per machine reaches Rs. 50,000.
(ii) Semi-skilled labour is expected to follow a 95% learning curve, continuing until production of the 20th machine.
(iii) Skilled labour is already proficient in producing such machines and is therefore not expected to experience any learning curve effect.
(iv) One supervisor hour is required for every 10 semi-skilled labour hours.

Required:
Compute the total cost of production if:

- skilled labour is hired
- semi-skilled labour is hired **(08)**

(The learning curve index for 95% is –0.074)

Q.6 Samstag Limited (SL) is engaged in the manufacture and sale of a single product, Samedi. The following information relate to the month of August 2025:

(i) **Actual production**
Number of Samedi produced: 7,500 units

(ii) **Actual costs**

	Rupees
Direct materials purchased and used - 70,000 kg	120 per kg
Direct labour - 18,000 hours	300 per hour
Variable production overhead	80 per hour

(iii) **Variances**

	Rupees
Favourable variances:	
Direct materials usage	550,000
Direct labour rate	450,000
Variable production overhead expenditure	180,000
Adverse variances:	
Direct materials price	700,000
Direct labour efficiency	975,000

(iv) **Other information:**

- The variable production overhead rate is calculated based on direct labour hours worked.
- Assume that there is no opening or closing work-in-process inventory.

Required:
For the month of August 2025, compute the following for SL:

- Standard cost per kg of direct material
- Standard direct material usage per unit of Samedi
- Standard direct labour rate per hour
- Standard time per unit of Samedi
- Standard variable production overhead rate per hour
- Variable production overhead efficiency variance **(08)**

Section B

Q.7 Titanic Limited (TTL) produces three brands of a consumer product. TTL's budget presented to the board of directors for the next year contains the following information:

Description		Brands		
		White	Black	Green
Sale and production quantities	***Kg***	250,000	200,000	150,000
Selling price per kg	***Rs.***	160	250	500
Cost of raw material per kg (exclusive of normal loss)	***Rs.***	60	90	140
Loss of raw material during production as % of input	**%**	20	25	30
Labour hours required per kg of quantity produced	***Hrs***	0.10	0.14	0.20
Cost of packaging per kg	***Rs.***	10	15	25

Additional information:

(i) Labour is paid at the rate of Rs. 200 per hour.
(ii) Factory overheads are estimated at Rs. 150 per labour hour, of which 60% are variable.
(iii) Selling and distribution costs are budgeted at 20% of sales plus a fixed cost of Rs. 5 million.
(iv) Administrative costs are fixed and are estimated at Rs. 10 million.

TTL's board of directors is not satisfied with the budget and has asked the marketing department to increase the selling prices to be able to achieve a net profit of Rs. 10 million.

However, the marketing director is of the view that, due to competitive pressures, it is not feasible to increase the selling prices. Furthermore, it is also not possible to increase the overall production quantity. Instead, he suggested increasing the sales volume of the highest margin brand by adjusting the sales mix so that the total sales across all brands remain 600,000 kg. The additional sales quantity of the highest margin brand would be achieved by an equal reduction in the sale quantities of the other two brands. To implement this suggestion, a new marketing campaign costing Rs. 1 million would be required.

Required:

(a) Compute the amount of break-even sales as per the budget. **(10)**
(b) Determine the revised sales mix (in quantity), as suggested by the marketing director, that would enable TTL to achieve a net profit of Rs. 10 million. **(06)**

Q.8 Murad Limited (ML) is engaged in the manufacturing and sale of a single product. The following information relates to ML for the year ended 31 August 2025:

	Rs. in '000
Sales (5,250,000 units)	84,000
Raw material consumed	26,340
Direct labour	8,400
Fuel and power (90% variable)	4,000
Depreciation – manufacturing (100% fixed)	2,976
Indirect labour (20% variable)	1,260
Other manufacturing costs (60% variable)	5,540
Marketing, selling and administration expenses (70% variable)	15,000
Finished goods inventory – opening	1,080

Additional information:

(i) ML uses the FIFO method for valuation of inventories.
(ii) The units of opening and closing inventories are as follows:

	Opening units	Closing units
Work-in-process	-	*60,000
Finished goods	160,000	180,000

**Complete 100% as to material and 40% as to conversion cost*

(iii) During the last year ended 31 August 2024, fixed factory overheads were 10% of total manufacturing costs.
(iv) ML had been following marginal costing up to last year. However, for the current year, management intends to prepare financial statements under both marginal as well as absorption costing.

Required:

(a) Prepare ML's statement of profit or loss for the year ended 31 August 2025 using:
- marginal costing
- absorption costing **(15)**

(b) Reconcile the net profit under marginal costing and absorption costing. **(02)**

Q.9 Shujaat Enterprises Limited (SEL) manufactures a single product that undergoes processing in two departments.

The data pertaining to August 2025 is as follows:

Costs of Production

Description	Department A		Department B	
	Cost of material	Conversion costs	Cost of material	Conversion costs
	---------- Rupees ----------			
Opening work-in-process	440,000	168,000	810,000	120,000
Cost incurred during the month	6,930,000	4,716,000	5,604,000	3,479,400

Quantitative Analysis

Description	Department A		Department B	
	Units	Process completion	Units	Process completion
Opening work-in-process	800	60%	600	80%
Units completed and transferred-out	12,000	-	11,750	-
Units rejected on inspection	600	-	550	-
Closing work-in-process	400	80%	300	30%

Additional information:

(i) SEL uses FIFO method for inventory valuation.
(ii) Rejected units of departments A and B are sold at a price, which is barely enough to cover the cost of transportation to the vendor.
(iii) Raw material in department A is added at the start of the process, whereas raw material in department B is added when the processing on units received from department A is 40% complete.
(iv) Inspection is carried out in each department when the processing is 70% complete.
(v) The normal rejection is 5% of inspected units in department A and 4% of inspected units in department B.

Required:

(a) Calculate the equivalent production units for each department. **(11)**
(b) Compute the cost of finished goods produced during August 2025. **(06)**

(THE END)