

INTERMEDIATE EXAMINATION

December 2023

P-8(CAC)  
Syllabus 2016

COST ACCOUNTING

Time Allowed: 3 Hours

Full Marks: 100

*The figures in the margin on the right side indicate full marks.*

*All sections are compulsory. Each section contains instructions regarding the number of questions to be answered within the section. All working notes must form part of the answer. Wherever necessary, candidates may make appropriate assumptions and clearly state them in the respective answer.*

SECTION-A

Section A contains Question Number 1. All parts of this question are compulsory.

**Answer the following questions:**

1. (a) **Choose the correct answer from the given alternatives (You may write only the Roman numeral and the alphabet chosen for your answer).** 1×10=10
- (i) State which of the following is/are characteristics of the contract costing.
- (1) Homogeneous products
  - (2) Customer-driven production
  - (3) Short timescale from commencement to completion of the cost unit.
- (A) (1) and (2) only  
(B) (1) and (3) only  
(C) (2) only  
(D) (3) only
- (ii) State which of the following is/are example (s) of By-Products.
- (1) Gas and Tars in Coke Ovens
  - (2) Molasses in Sugar Industry
  - (3) Curd and butter in a dairy
  - (4) Edible oils and oil cakes
- (A) (1) and (2) only  
(B) (3) and (4) only  
(C) (1), (2) and (4) only  
(D) (2) and (4) only
- (iii) Which of the following are the actual costs of acquiring assets or producing goods or services?
- (A) Historical Costs
  - (B) Imputed Costs
  - (C) Replacement Costs
  - (D) Engineered Cost

- (iv) Which of the following is considered to be a normal loss of material?
- (A) Loss due to accident
  - (B) Pilferage
  - (C) Loss due to breaking the bulk
  - (D) Loss due to careless handling of material
- (v) ZOM Ltd. earned a profit of ₹ 80000 during the month of August. If the selling price and marginal cost of the product are ₹ 10 and ₹ 6 per unit respectively, what will be the amount of Margin of Safety (MOS)?
- (A) ₹ 400000
  - (B) ₹ 300000
  - (C) ₹ 200000
  - (D) ₹ 125000
- (vi) Which one of the following items is not included in preparation of cost sheet?
- (A) Purchase returns
  - (B) Carriage inwards
  - (C) Sales commission
  - (D) Interest paid
- (vii) The allotment of whole item of Cost to a Cost Centre or Cost Unit is called as
- (A) Cost allocation
  - (B) Cost apportionment
  - (C) Overhead absorption
  - (D) Cost classification
- (viii) In a process 5000 units are introduced during a period. 5% input is normal loss. Closing work-in-progress 60% complete is 625 units. 4125 completed units are transferred to next process. Equivalent production for the period is
- (A) 4000 units
  - (B) 4500 units
  - (C) 4600 units
  - (D) 4750 units
- (ix) Which one of the following CASs deals with the principles and methods of determining joint cost?
- (A) CAS-4 (Revised 2018)
  - (B) CAS-8 (Limited Revision 2017)
  - (C) CAS-15
  - (D) CAS-19

- (x) In a factory of BANS LTD. where standard costing was followed, during a period Actual 2500 hours were worked at a standard rate of ₹ 8 per hour. The Direct labour efficiency variance was ₹ 800 (Adv.). How many standard hours produced?

- (A) 2670 hours  
(B) 2600 hours  
(C) 2400 hours  
(D) 2200 hours

- (b) Match the statement in Column I with the most appropriate statement in Column II.

(You may opt to write only the Roman numeral and the matched alphabet instead of copying contents into the answer book)

1×5=5

	Column I		Column II
(i)	Imputed Cost	(A)	Drug Industries
(ii)	FSN Analysis	(B)	Sunk Cost
(iii)	Job Costing	(C)	Decision Package
(iv)	Joint Costs	(D)	Notional Cost
(v)	Zero Based Budgeting	(E)	Automobile Garages
		(F)	CAS-19
		(G)	Process of Classifying materials

- (c) State whether the following are 'True' or 'False': (You may write only the Roman numeral and whether 'True or False' without copying the statements into the answer book). 1×5=5

- (i) Cost is a fact, price is a policy.  
(ii) Indirect Expenses and Overheads mean the same thing.  
(iii) While standard is a unit concept, budget is a total concept.  
(iv) There is inverse relationship between Batch size and carrying costs.  
(v) In contract costing, the unit of cost is a job.

- (d) Fill in the blanks: (You may write only the Roman numeral and the content filling the blank):

1×5=5

- (i) Profit is the resultant of two varying factors viz \_\_\_\_\_ and \_\_\_\_\_.  
(ii) In the Break-even chart, x-axis represents \_\_\_\_\_.  
(iii) The Principal Budget factor for Consumer goods manufacturers is normally \_\_\_\_\_.  
(iv) \_\_\_\_\_ deals with the principles and methods of determining pollution control cost.  
(v) The method of costing used in undertaking like Gas Companies, Cinema houses etc. is known as \_\_\_\_\_.

SECTION-B

Answer any five questions from question numbers 2 to 8. Each question carries 15 marks 15×5= 75

2. (a) SINT LTD., a manufacturing Company, is undecided as to what kind of wage scheme should be introduced. The following particulars have been compiled in respect of three workers. Which are under consideration of the management?

	I	II	III
Actual Hours worked	380	100	540
Hourly rate of wages (in ₹)	40	50	60
Production in units:			
- Product A	210	-	600
- Product B	360	-	1350
- Product C	460	250	-
Standard time allowed per unit of each product is:			
Minutes	A 15	B 20	C 30

For the purpose of piece rate, each minute is valued at ₹ 1.

**Required:**

Calculate the wages of each worker under:

- Guaranteed hourly rate basis
- Piece work earning basis, but guaranteed at 75% of basic pay (Guaranteed hourly rate if his earnings are less than 50% of basic pay.)
- Premium bonus basis where the worker received bonus based on Rowan scheme.

1+3+4=8

- (b) SONTA LTD. has three production departments and two service departments. The overhead distribution sheet showed the following:

<u>Production Departments:</u>	(₹)
MP	25000
BQ	31000
NR	28000
<u>Service Departments:</u>	
S	8000
T	13900

**Required:**

Using the following bases of apportionment, distribute the cost of service departments under simultaneously Equation Method:

	MP	BQ	NR	S	T
Department S	30%	20%	40%	-	10%
Department T	40%	15%	25%	20%	-

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3. (a) State what are the objectives and scope of cost **Accounting Standard (CAS)**. 4 on cost of Production for Captive Consumption. 2+4=6
- (b) The following information has been extracted from the financial books of ABON LTD. for the year ended March 31, 2023.

Particulars	Amount (₹)
Sales (20000 units)	40,00,000
Materials	16,00,000
Wages	8,00,000
Factory Overheads	7,20,000
Office and Administrative Overheads	4,16,000
Selling and Distribution Overhead	2,88,000
Closing stock of Finished Goods (1230 units)	2,40,000
Work-in-Progress (closing):	
Materials	48,000
Labour	32,000
Overheads (Factory)	32,000
Goodwill written off	3,20,000
Interest on Capital	32,000
Dividend received	10,000
Interest received	5,000

In the Costing records, factory overhead is charged at 100% of wages, administration overhead at 10% of works cost and selling and distribution overhead at ₹16 per unit sold.

**Required:**

- (i) **Find** out the profit as per Cost Accounts
- (ii) **Prepare** the Profit and Loss Account as per Financial Books

- (iii) Prepare a statement reconciling Profit shown by Cost and Financial Accounts for the year ended March 31, 2023. 3+3+3=9

4. (a) The following data are available from the books and records of ROHINT LTD. for the month of August, 2023.

Direct Labour Cost ₹1,20,000 (120% of Factory Overheads)

Cost of Sales = ₹ 4,00,000

Sales = ₹ 5,00,000

Accounts show the following figures:

	1 <sup>st</sup> August, 2023 (₹)	31 <sup>st</sup> August, 2023 (₹)
<b>Inventory:</b>		
Raw material	20000	35000
Work-in-Progress	20000	30000
Finished goods	50000	60000
<b>Other Details:</b>		
Selling expenses		22000
General & Admin. Expenses		18000

General & Admin. Expenses are not relating to the production activity.

You are required to prepare, a cost sheet for the month of August, 2023 showing:

- (i) Prime cost
- (ii) Works cost
- (iii) Cost of Production
- (iv) Cost of Goods sold
- (v) Cost of Sales and Profit earned

4+1+1+1+2=9

- (b) XINT LTD. in the course of refining crude oil obtains four joint products P, Q, R and S. The total cost till the split off point was ₹ 9,76,640. The output and sales in the year 2023 were as follows:

Product	Output (Gallon)	Sales Amount (₹)	Separate Costs Amount (₹)
D	50,000	12,50,000	2,60,000
Q	10,000	30,000	20,000
R	5,000	50,000	-
S	8,000	80,000	10,000

**Required:**

- (i) **Determine** the net income for each of the products if the joint costs are apportioned on the basis of sales value of the different products.
- (ii) **Calculate** the net income of each of the products if the company decides to sale the products at the split off point itself as-P @ ₹ 18, Q @ ₹ 1.50, R @ ₹ 10 and S @ ₹ 7.80 per gallon.
- (iii) **Advise** the Management of XINT LTD. as to whether the four products are to be sold at the split off point or after further processing. 3+2+1=6
5. (a) MEDCO HEALTH CARE runs an intensive Medical Care Unit. For this purpose, it has hired a building at a rent of ₹ 50,000 per month with the agreement to bear the repairs and maintenance charges also.

The unit consists of 100 beds and 5 more beds can comfortably be accommodated when the situation demands. Though the unit is open for patients all the 365 days in a year, scrutiny of accounts for the year 2022 reveals that only for 120 days in the year, the unit had the full capacity of 100 patients per day and for another 80 days, it had, on an average only 40 beds occupied per day. But there were occasions when the beds were full, extra beds were hired at a charge of ₹ 50 per bed per day. This did not come to more than 5 beds above the normal capacity on any one day. The total hire charges for the extra beds incurred for the whole year amounted to ₹ 20000.

The unit engaged expert doctors from outside to attend on the patients and the fees were paid on the basis of the number of patients attended and time spent by them which on an average worked out to 30,000 per month in the year 2022.

The permanent staff expenses and other expenses of the unit were as follows:

	₹
2 Supervisors each at a per month salary of	5,000
4 nurses each at a per month salary of	3,000
2 ward boys each at a per month salary of	1,500
Other expenses for the year were as under:	
Repairs and Maintenance	28,000
Food supplied to patients	4,40,000
Caretaker and other services for patients	1,25,000
Laundry charges for bed linen	1,40,000
Medicines supplied	2,80,000
Cost of Oxygen etc. other than directly borne for treatment of patients	75,000
General Administration Charges allocated to the unit	71,000

**Required:**

- (i) **What** is the profit per patient day made by the unit in the year 2022 if the unit recovered an overall amount of ₹ 200 per day on an average from each patient.
- (ii) The unit wants to work on a budget for the year 2023, but the number of patients requiring medical care is a very uncertain factor. Assuming that same revenue and expenses prevail in the year 2023 in the first instance, **work out** the number of patient days required by the unit to break even. 7+2=9
- (b) M/s RON (PVT) LTD. commenced a contract on 1st July, 2022 and the company closes its account for the year on 31st March every year. The following information relates to the contract as on 31st March 2023:

(i) Material issued	₹ 948000
(ii) Direct wages	₹ 457200
(iii) Prepaid direct wages as on 31.03.2023	₹ 108000
(iv) Administration charges	₹ 720000
(v) A supervisor, who is paid ₹ 50,000 per month, has devoted two third of his time to this contract.	
(vi) A plant costing ₹ 7,85,270 has been on the site for 185 days, its working life is estimated at 9 years and its scrap value is ₹ 75,000.	
<p>The contract price is ₹ 42 lakhs. On 31st March 2023 two-third of the contract was completed. The Architect issued certificate covering 50% of the contract price and the contractor had been paid ₹ 15.75 lakhs on account (Assume 365 days in a year).</p>	
<b>You are required to:</b>	
(i) <b>Prepare</b> a Contract Account showing work cost.	
(ii) <b>Calculate</b> Notional Profit or Loss as on 31st March, 2023.	

4+2=6

6. (a) KONT LTD., a toy company is currently selling 24000 toys annually. It provides the following details for the year ended March 31, 2023.

	₹
Selling price per Toy	400
Variable cost per Toy	250
<b>Fixed Costs:</b>	
Staff salaries for the year	12,00,000
General office costs for the year	8,00,000
Advertising costs for the year	4,00,000

**You are required to:**

- (i) Calculate the Break-even Point and Margin of Safety in Sales revenue and number of Toys Sold.
- (ii) If it is decided to introduce selling commission of ₹ 30 per Toy how many toys would require to be sold in a year to earn a net income ₹ 1,50,000?
- (iii) Assuming that for the year 2023-24, an additional staff salary of ₹ 3,30,000 is anticipated and price of a toy is likely to be increased by 15%. What should be the Break-even point in number of toys?  
2+2+2=6
- (b) ZESMIN LTD., a manufacturing company, manufactures a product, currently utilizing 80% capacity with a turnover of ₹ 8,00,000 at ₹ 25 per unit. The cost data are as under:

Material cost ₹ 7.50 per unit, Labour Cost ₹ 6.25 per unit.

Semi-variable cost (including variable cost of ₹ 3.75 per unit) ₹ 1,80,000

Fixed Cost ₹ 90,000 upto 80% level of output, beyond this an additional ₹ 20,000 will be incurred.

**You are required to calculate:**

- (i) Activity level at Break-even point
- (ii) Number of units to be sold to earn a net income of 8% of sales
- (iii) Activity level needed to earn a profit of ₹ 95,000
- (iv) What should be the selling price per unit, if break-even- point is to be brought down to 40% activity level?  
3×2+3=9
7. (a) A factory of GOXIN LTD. using standard costing system, manufactures a chemical product VON with three ingredient chemicals. A, B and C as per standard data given below:

Chemical	Percentage of total input	Standard cost per kg (₹)
A	50%	40
B	30%	60
C	20%	95

There is a process loss of 5% during the course of manufacture.

The Management gives the following details for a certain week.

Chemical Consumed	Quantity Purchased and issued	Actual Cost (₹)
A	5200 kg	2,34,000
B	3600 kg	2,19,600
C	1700 kg	1,58,100

Output of finished product: 10200 kg.

**Required:**

Analyze the following Material Variances:

- (i) Material Cost Variances (MCV)
- (ii) Material Price Variance (MPV)
- (iii) Material Mix Variance (MMV)
- (iv) Material Yield Variance (MYV)
- (v) Material Usage Variance (MUV)

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- (b) The monthly budgets for manufacturing overhead of SHEBAN LTD., for two levels of activity were as follows:

Capacity	60%	100%
Budgeted Production (units)	600	1000
	₹	₹
Wages	1200	2000
Consumable stores	900	1500
Maintenance	1100	1500
Power & Fuel	1600	2000
Depreciation	4000	4000
Insurance	1000	1000
	9800	12000

**Required:**

- (i) Prepare a Budget for 80% capacity; and
- (ii) Find the total cost, both fixed and variable per unit of output at 60%, 80% and 100% capacity. 4+3= 7

8. Answer any three out of the following four questions:

5×3=15

- (a) State What are the main objectives of Cost Accounting. 5
- (b) What is Economic Order Quantity (EOQ)? State the assumptions underlying EOQ. 5
- (c) Enumerate what are the important areas of managerial decision opened up by the Marginal Costing Technique. 5

(d) Mentioned the cost units (Physical measurements) for the following industry/ product:

0.5 × 10 = 5

- (i) Automobile
  - (ii) Gas
  - (iii) Brick works
  - (iv) Power
  - (v) Steel
  - (vi) Transport (by road)
  - (vii) Chemical
  - (viii) Oil
  - (ix) Cement
  - (x) Brewing
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