INTERMEDIAE EXAMINATION | SET - 2
MODEL ANSWERS | TERM – DECEMBER 2023
PAPER – 8 | SYLLABUS 2022

COST ACCOUNTING

Time Allowed: 3 Hours **Full Marks: 100**

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

Where considered necessary, suitable assumptions may be made and clearly indicated in the answer.

Section - A (Compulsory)

1. Choose the correct alternative: [15 × 2 = 30]

(i) Which of the following is not a feature of Job Costing?
- a. Each job maintains its separate identity throughout the production stage
- b. The job is meant for a mass market
- c. Production pattern is not repetitive and continuous
- d. Production begins only after getting order from the customer

(ii) Cost of Sales = Cost of Production + ______________________.
- a. Selling and Distribution Overhead rate per unit
- b. Factory Overhead Cost
- c. Direct Labour
- d. None of the above

(iii) Charging to a cost centre those overheads that result solely for the existence of that cost centre is known as:
- a. Allocation
- b. Apportionment
- c. Absorption
- d. Allotment

(iv) P/V ratio will increase if:
- a. There is a decrease in fixed cost
- b. There is an increase in fixed cost
- c. There is a decrease in selling price per unit.
- d. There is a decrease in variable cost per unit.

(v) The following is not treated as a manufacturing overhead:
- a. Lubricants
- b. Cotton waste
- c. Apportioned administration overheads
- d. Night shift allowance paid to a factory worker due to general work pressure.

(vi) Which of the following would not be used to estimate standard direct material prices?
- a. The availability of bulk purchase discounts
- b. Purchase contracts already agreed
- c. The forecast movement of prices in the market
- d. Performance standards in operation

(vii) The main purposes of accounting of joint products and by-products is to:
- a. Determine the replacement cost

b. Determine the opportunity cost
c. Determine profit or loss on each product line
d. None of the above

(viii) A certain process needed standard labour of 24 skilled labour hours and 30 unskilled labour hours at ₹ 60 and ₹ 40 respectively as the standard labour rates. Actually, 20 and 25 labour hours were used at ₹ 50 and ₹ 50 respectively. Then, the labour mix variance will be:

a. Adverse
b. Favourable
c. Zero
d. Favourable for skilled and unfavourable for unskilled

(ix) 1200 units were introduced in a process in which 120 units is the normal loss. If the actual output is 900 units, then there is:

a. No abnormal gain
b. Abnormal loss of 180 units
c. No abnormal loss
d. Abnormal gain of 180 units

(x) Z Ltd. is planning to sell 1,00,000 units of product A for ₹ 12.00 per unit. The fixed costs are ₹ 2,80,000. In order to realize a profit of ₹ 2,00,000, what would the variable costs be?

a. ₹4,80,000
b. ₹ 7,20,000
c. ₹ 9,00,000
d. ₹ 9,20,000

(xi) A firm has fixed expenses ₹ 90,000, sales ₹ 3,00,000 and profit ₹ 60,000. The P/V ratio of the firm is:

a. 10%
b. 20%
c. 30%
d. 50%

(xii) When costing loss is ₹ 5,600, administrative overhead under-absorbed being ₹ 600, the loss as per financial accounts should be _______ .

a. ₹ 5,000
b. ₹ 5,600
c. ₹ 6,200
d. None of the above

(xiii) At the economic ordering quantity level, the following is true:

a. The ordering cost is minimum
b. The carrying cost is minimum
c. The ordering cost is equal to the carrying cost
d. The purchase price is minimum

(xiv) A company has to pay a ₹ 1 per unit royalty to the designer of a product which it manufactures and sells. The royalty charge would be classified in the company's accounts as a ____

a. Direct expense
b. Production overhead
c. Administrative overhead
d. Selling overhead.

(xv) If the time saved is less than 50% of the standard time, then the wages under Rowan and Halsey premium plan on comparison gives:
a. Equal wages under two plans
b. More wages to workers under Halsey Plan than Rowan Plan
c. More wages to workers under Rowan Plan than Halsey Plan
d. None of the above.

Answer:

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
b	a	a	d	d	d	c	c	b	b	d	c	c	a	c

Section - B

(Answer any five questions out of seven questions given. Each question carries 14 marks.)

2. (a) MNQ LLP submits the following information on 31st March 2023. Based on the given data, illustrate and prepare a statement of cost.

Details	(₹)
Sales for the year	2,75,000
Inventories at the beginning of the year: Finished goods	7,000
Work in Progress	4,000
Purchase of the material for the year	1,10,000
Material inventory: At the beginning of the year	3,000
At the end of the year	4,000
Direct Labour	65,000
Factory overhead: 60% of direct labour cost	
Inventories at the end of the year: Finished goods	8,000
Work in Progress	6,000
Other expenses for year:	
Selling expenses - 10% of sales	
Administrative expense – 5% of sales	

[7]

(b) The management of XYZ Ltd is worried about the increasing Labour Turnover in the factory and before analysing the causes and taking remedial steps; they want to have an idea of the profit foregone as a result of Labour Turnover during the last year. Last year's sales amounted to ₹83,03,300 and the profit / volume ratio was 20%. The total number of actual hours worked by the direct labour force was 4.45 lakhs. As a result of the delays by the personnel department in filling vacancies due to Labour Turnover, 1,00,000 potentially productive hours were lost. The actual direct labour hours included 30,000 hours attributable to training new recruits, out of which, half of the hours were unproductive. The cost incurred consequent on labour turnover revealed, on analysis the following: Settlement cost due to leaving: ₹43,820, recruitment costs: ₹26,740, selection costs: ₹12,750 and training costs: ₹30,490.
Assuming that the potential production lost as a consequence of Labour Turnover could have been sold at prevailing prices, compute the profit foregone last year on account of Labour Turnover. [7]

Answer:

(a)

Particulars	₹	₹
Inventory (RM) at the beginning of the year	3,000	
Add: Inventory (RM) during the year	1,10,000	
	1,13,000	
Less: Inventory (RM) at the end of the year	(4,000)	
Material consumed		1,09,000
Add: Direct Labour		65,000
Prime Cost		1,74,000
Add: Factory Overhead @ 60% of direct labour		39,000
Works Cost		2,13,000
Adjustment for work in progress		
Opening WIP	4,000	
Less: Closing WIP	(6,000)	(2,000)
		2,11,000
Add: Administrative Overhead5% of Sales i.e. 2,75,000		13,750
Cost of Production		2,24,750
Adjustment for Finished Goods		
Opening Stock of Finished Goods	7,000	
Less: Closing Stock of Finished Goods	(8,000)	(1,000)
Cost of goods sold		2,23,750
Add: Selling overhead @10% of Sales i.e. ₹2,75,000		27,500
Cost of Sales		2,51,250
Profit (Balancing figure)		23,750
Sales		2,75,000

(b) Profit foregone = Loss in Contribution + Additional Cost incurred as a result of labour turnover

(i) Actual Productive Hours during last year
= 4,45,000 – 15,000 [i.e. 50% × 30,000 hours]
= 4,30,000 hours

(ii) Sales during last year = ₹83,03,300

(iii) Productive Hours Lost in Current Year = 1,00,000 Hrs.

∴ Loss in Sales during the current year = $\frac{₹83,03,300}{4,30,000} \times 1,00,000$ Hrs.

= ₹19,31,000

and Loss in Contribution = 20% × ₹19,31,000 = ₹3,86,200

Computation of Profit Foregone during the current year

	Amount (₹)
Contribution Lost	3,86,200
Settlement Cost due to leaving	43,820
Recruitment Cost	26,740
Selection Cost	12,750
Training Cost	30,490
Profit Foregone	**5,00,000**

3. (a) The summary as per primary distribution is as follows:
Production departments A- ₹ 2,500; B- ₹ 2,300 & C- ₹ 1,700
Service departments X–₹ 700; Y–₹ 900

Expenses of service departments are distributed in the ratios of:
X department: A- 20%, B- 40%, C- 30% and Y- 10%
Y department: A- 40%, B- 20%, C- 20% and X- 20%

Prepare and show the distribution of service costs among A, B and C under repeated distribution method. [7]

(b) The net profits of a manufacturing company appeared at ₹ 64,500 as per financial records for the year ended 31st December, 2022. The cost books however, showed a net profit of ₹ 86,460 for the same period. A careful scrutiny of the figures from both the sets of accounts revealed the following facts.

Particulars	**(₹)**
i. Income tax provided in financial books	**20,000**
ii. Bank Interest (Cr) in financial books	**250**
iii. Work overhead under recovered	**1,550**
iv. Depreciation charged in financial records	**5,600**
v. Depreciation recovered in cost	**6,000**
vi. Administrative overheads over-recovered	**850**
vii. Loss due to obsolescence charged in financial accounts	**2,800**
viii. Interest on investments not included in cost accounts	**4,000**
ix. Stores adjustments (Credit in financial books)	**240**
x. Loss due to depreciation in stock value	**3,350**

Prepare Reconciliation Statement. [7]

Answer:

(a)

Particulars	**A** ₹	**B** ₹	**C** ₹	**X** ₹	**Y** ₹
As per primary distribution	2,400	2,100	1,500	700	900
Service department X (2:4:3:1)	140	280	210	(700)	70

Service department Y (4:2:2:2)	388	194	194	194	(970)
Service department X (2:4:3:1)	38.8	77.6	58.2	(194)	19.4
Service department Y (4:2:2:2)	7.76	3.88	3.88	3.88	(19.4)
Service department X (2:4:3:1)	0.776	1.552	1.164	(3.88)	0.388
Total	**2,975.336**	**2,657.032**	**1,967.244**	**-**	**0.388**

(b)

Statement showing Reconciliation of Profit shown by Cost and Financial Accounts as on 31-12-2021

Particulars	₹	₹
Profit as per Financial Accounts		64,500
Add: Income tax provided in financial accounts only	20,000	
Add: Works overhead under recovered	1,550	
Add: Loss due to obsolescence charged in financial accounts only	2,800	
Add: Loss due to depreciation in stock value (recorded in financial accounts only)	3,350	27,700
		92,200
Less: Bank interest credited in financial accounts only	250	
Less: Over recovery of depreciation in cost accounts (6,000 – 5,600)	400	
Less: Administrative Overhead over recovered	850	
Less: Interest on investments not included in cost accounts	4,000	
Less: Stores adjustments (credit in financial accounts)	240	5,740
Profit as per Cost Accounts		86,460

4. (a) A transport service company is running five buses between two towns, which are 50 kilometers apart. Seating capacity of each bus is 50 passengers. The following particulars are obtained from their books for April 2022.

Particulars	Amounts ₹
Wage of drivers, conductors and cleaners	**2,40,000**
Salaries of office staff	**1,00,000**
Diesel oil and other oil	**3,50,000**
Repairs and maintenance	**80,000**
Taxation, insurance etc.	**1,60,000**
Depreciation	**2,60,000**
Interest and other expenses	**2,00,000**
Total	**13,90,000**

Actually, passengers carried were 75% of seating capacity. All buses ran on all day of the month. Each bus made one round trip per day. Calculate out the cost per passenger kilo meter. **[7]**

(b) A company produces a product 'M' by three distinct processes before it is ready for sale. From the information given below, work out the selling price of the product if the Management decides to earn a profit of 20% over its works cost. Prepare the Process A/c for each process.

	Particulars	Process		
		A	B	C
1	Input of raw materials @ ₹40 per kg. (kg)	10,000	-	-

2	**Normal loss of input**	**5%**	**5%**	**5%**
3	**Delivered to next process (kg)**	**9,000**	**8,000**	**-**
4	**Total direct labour cost (₹)**	**15,000**	**15,750**	**13,000**
5	**Variable overhead (%of direct labour)**	**150%**	**120%**	**100%**
6	**Fixed overhead (% of direct labour)**	**250%**	**180%**	**200%**
7	**Finished stock held back (kg)**	**400**	**400**	**-**

[7]

Answer:

(a)

Operating Cost Statement for the month of April 2022

Particulars	**Amounts ₹**	**Amounts ₹**
A. Standing Charges		
• Wages of drivers, conductors and cleaners.	2,40,000	
• Salaries of office staff	1,00,000	
• Taxation, insurance etc.	1,60,000	
• Interest and other expenses	2,00,000	
• Depreciation	2,60,000	
• Total standing charges		9,60,000
B. Running and Maintenance Charges		
• Repairs and maintenance	80,000	
• Diesel oil and other oil	3,50,000	
• Total running and maintenance charges		4,30,000
C. Total cost [A+B]		13,90,000
D. Cost per passenger kilometre* ₹13,90,000 / 5,62,500 passenger kilometers		2.471

Working:

* Passenger kilometers are computed as below:

= Number of buses × Distance in one round trip × Seating capacity available × Percentage of seating capacity actually used × Number of days in a month × No. of trips

= 5 buses × 50 kilometers × 2 × 50 passengers × 75% × 30 days = 5,62,500 passenger-kms

(b)

Process A Account

Particulars	Kg.	₹	Particulars	Kg.	₹
To Input of Raw Material	10,000	4,00,000	By Normal loss	500	---
To Direct Labour		15,000	By Abnormal loss	100	5,000
To Variable Overheads		22,500	By Transfer to Process B	9,000	4,50,000
To Fixed Overheads		37,500	By Closing Stock	400	20,000
	10,000	4,75,000		10,000	4,75,000

Cost per kg = ₹4,75,000/9,500kg = ₹50

Process B Account

Particulars	Kg.	₹	Particulars	Kg.	₹
To Transfer From Process A	9,000	4,50,000	By Normal loss	450	---
To Direct Labour		15,750	By Abnormal loss	150	9,000
To Variable Overheads		18,900	By Transfer To Process C	8,000	4,80,000
To Fixed Overheads		28,350	By Closing Stock	400	24,000
	9,000	5,13,000		9,000	5,13,000

Cost per kg = ₹5,13,000/8,550 kg = ₹60

Process C Account

Particulars	Kg.	₹	Particulars	Kg.	₹
To Transfer From Process B	8,000	4,80,000	By Normal loss	400	---
To Direct Labour		13,000	By Transfer to Finished Stock A/c	7,600	5,32,000
To Variable Overheads		13,000			
To Fixed Overheads		26,000			
	8,000	5,32,000		8,000	5,32,000

Cost per kg. = ₹ 5,32,000/7,600 kg = ₹70

Selling Price = ₹ 70 × 120/100 = ₹ 84 per kg. (20% above Works Cost)

5. (a) CBA Ltd., manufactures certain grades of products known as M, B1 and B2. In course of manufacture of product M (main product), by-products - B1 and B2 emerge. The joint expenses of manufacture amount to ₹ 2,37,600.

All the three products are processed further after separation and sold as per details given below:

	Product – M	**(By Products) Product – B1**	**Product – B2**
Sales (₹)	**2,00,000**	**1,20,000**	**80,000**
Cost incurred after separation (₹)	**20,000**	**15,000**	**10,000**
Profit as percentage on sales	**25**	**20**	**15**

Total fixed selling expenses are 10% of total cost of sales which are apportioned to the three products in the ratio of 20:40:40.

Required:

(i) Prepare a statement showing the apportionment of joint costs to the products (M, B1 and B2)

(ii) If the product B1 (by product) is not subject to further processing and is sold at the point of separation, for which there is a market at ₹1,00,440 without incurring any selling expenses, would you advise its disposal at this stage? Show the workings. [7]

(b) A manufacturing concern which has adopted standard costing furnishes the following information:

Standard

Material for 70 kg of finished product of 100 kg

Price of materials @ ₹ 1 per kg

Actual	
Output	**2,10,000 kg.**
Material used	**2,80,000 kg.**
Cost of materials	**₹ 2,52,000**

Calculate:

a. **Material Cost Variance**

b. **Material Price Variance**

c. **Material Usage Variance** **[7]**

Answer:

(a) Statement of Apportionment of Joint Cost:

Particulars	Total	Product	By-Products	
		M	B	B
	₹	₹	₹	₹
Sales	4,00,000	2,00,000	1,20,000	80,000
Less: Profit	86,000	50,000	24,000	12,000
Cost of Sales	3,14,000	1,50,000	96,000	68,000
Less: Selling & Distribution Expenses (10% of Rs. 3,14,000 in the Ratio 20:40:40)	31,400	6,280	12,560	12,560
Cost of Production	2,82,600	1,43,720	83,440	55,440
Less: After separation Cost	45,000	20,000	15,000	10,000
Joint Cost	2,37,600	1,23,720	68,440	45,440

By product B1 earns ₹24,000 as profit after separation
Profit before separation = ₹1,00,440 – ₹68,440 = ₹32,000
If By product B1 is sold before further processing, then the profit of the by product may be increased by ₹ (32,000 - 24,000) = ₹8,000.
Hence it is advisable to sell the product B1 at the point of separation.

(b) **Computation of Required Values**

(1) SQSP (₹)	(2) AQSP (₹)	(3) AQAP (₹)
[210,000 x 100/70] x 1	280,000 x 1	
3,00,000	280,000	252,000

Computation of Required Variances:

(i) Material Usage Variance = (1) –(2) = ₹20,000 (F)
(ii) Material Price Variance = (2) –(3) = ₹28,000(F)
(iii) Material Cost Variance = (1)–(3) = ₹48,000(F)

6. **The Dynamic company has three divisions. Each of which makes a different product. The budgeted data for the coming year are as follows:**

Particulars	Division A (₹)	Division B (₹)	Division C (₹)
Sales	1,12,000	56,000	84,000
Direct Material	14,000	7,000	14,000
Direct Labour	5,600	7,000	22,400
Direct Expenses	14,000	7,000	28,000
Fixed Cost	28,000	14,000	28,000
Total Cost	61,600	35,000	92,400

The management is considering to close down the Division C. There is no possibility of reducing fixed cost. Analyse whether or not Division C should be closed down. [14]

Answer:

Statement showing computation of profit before closing down Division C

Sl No.	Particulars	Division A	Division B	Division C	Total
		(₹)	(₹)	(₹)	(₹)
i.	Sales	1,12,000	56,000	84,000	2,52,000
ii.	Variable Cost Direct				
	Material Direct	14,000	7,000	14,000	35,000
	Labour Direct	5,600	7,000	22,400	35,000
	Expenses	14,000	7,000	28,000	49,000
iii.	Total Variable Cost	33,600	21,000	64,400	1,19,000
iv.	Contribution (i. – iii.)	78,400	35,000	19,600	1,33,000

Sl No.	Particulars	Division A	Division B	Division C	Total
		(₹)	(₹)	(₹)	(₹)
v.	Fixed Cost	28,000	14,000	28,000	70,000
vi.	Profit (iv. – v)				63,000

Statement showing computation of profit closing down Division C

Sl No.	Particulars	Division A	Division B	Total
		(₹)	(₹)	(₹)
i.	Sales	1,12,000	56,000	1,68,000
ii.	Variable Cost Direct			
	Material Direct	14,000	7,000	21,000
	Labour Direct	5,600	7,000	12,600
	Expenses	14,000	7,000	21,000
iii.	Total Variable Cost	33,600	21,000	54,600
iv.	Contribution (i. – iii.)	78,400	35,000	1,13,400
v.	Fixed Cost			70,000

vi.	Profit (iv. – v.)			43,400

If Division C is closed down then there is a reduction in the overall profit by ₹ 19,600 (63,000 – 43,400). Since, there is no possibility of reducing the fixed cost of Division C, so as long as if there is a contribution of ₹ 1 from division C, it should not be closed down.

7. (a) You are required to prepare a Selling Overhead Budget from the estimates given below:

	Amount (₹)
Advertisement (Fixed)	**1,000**
Salaries of the Sales Department (Fixed)	**1,000**
Expenses of the Sales Department (Fixed)	**750**
Salesmen's Remuneration (Fixed)	**3,000**
Salesmen's Commission @ 1% on sales excluding Agent's Sales	
Carriage Outwards: Estimated @ 5% on sales	
Agent's Commission: 7½ % on Agent's sales	

The sales during the period were estimated as follows:

(i) ₹ 80,000 including Agent's Sales ₹ 8,000
(ii) ₹ 90,000 including Agent's Sales ₹ 10,000
(iii) ₹ 1,00,000 including Agent's Sales ₹ 10,500 **[7]**

(b) Describe the disclosures to be made as per CAS 3. **[7]**

Answer:

(a) Selling Overhead Budget

Particulars	₹	₹	₹
Sales	80,000	90,000	1,00,000
A. Fixed Overhead			
Advertisement	1,000	1,000	1,000
Salaries of Sales Dept.	1,000	1,000	1,000
Expenses of Sales Dept.	750	750	750
Salesmen Remuneration	3,000	3,000	3,000
Total (A)	5,750	5,750	5,750
B. Variable Overhead			
Salesmen Commission	720 [(80,000 – 8,000) × 1%]	800 [(90,000 – 10,000) × 1%]	895 [(1,00,000 – 10,500) × 1%]
Carriage Outward	4,000 [80,000 × 5%]	4,500 [9,00,000 × 5%]	5,000 [1,00,000 × 5%]
Agent's Commission	600 [8,000 × 7.5%]	750 [10,000 × 7.5%]	788 [10,500 × 7.5%]
Total (B)	**5,320**	**6,050**	**6,683**
Grand Total (A + B)	**11,070**	**11,800**	**12,433**

(b) Disclosures to be made as per CAS 3:

The cost statements shall disclose the following:

1. The basis of assignment of Production or Operation Overheads to the cost objects
2. Production or Operation Overheads incurred in foreign exchange
3. Production or Operation Overheads relating to resources received from or supplied to related parties
4. Any Subsidy, Grant, Incentive or any amount of similar nature received or receivable reduced from Production or Operation Overheads
5. Credits or recoveries relating to the Production or Operation Overheads
6. Any abnormal cost not forming part of the Production or Operation Overheads
7. Any unabsorbed Production or Operation Overheads

Disclosures shall be made only where material, significant and quantifiable.

8. Write short notes on the following: [4+5+5=14]

(a) Importance and objectives of Cost Sheet
(b) Requisites of good Material Control System
(c) Items to be 'excluded' for the purpose of measuring Employee Cost.

Answer:

(a) Importance and objectives of cost sheet:

(i) Determining cost: The main objective of the cost sheet is to obtain an accurate product cost. Both the total cost and cost per unit of a product is calculated with accuracy.
(ii) Fixing selling price: The cost sheet furnishes the production cost which helps fixation of selling price.
(iii) Cost comparison: It helps the management compare the current cost of a product with a previous per unit cost for the same product. Comparing the costs helps management take corrective measures if costs have increased.
(iv) Cost control: The cost sheet is an important document for a manufacturing unit, as it helps in controlling production costs. Using an estimated cost sheet aids in monitoring labour, material and overhead costs at each step of production.
(v) Decision-making: Some of the most important decisions management makes are based on the cost sheet. Whenever a business needs to produce or buy a component, or quote prices for its goods on a tender, managers refer to the cost sheet.
(vi) Inter-firm and intra-firm comparison.

(b) Requisites of good Material Control System

(i) Coordination and cooperation between the various departments concerned viz. purchase, receiving, inspection,
(ii) storage, issues and accounts and cost departments.
(iii) Use of standard forms and documents in all the stages of control.
(iv) Classification, coordination, standardization and simplification of materials.
(v) Planning of requirement of material.
(vi) Efficient purchase organisation.
(vii) Budgetary control of purchases.
(viii) Planned storage of materials, physical control as well as efficient book control through satisfactory storage
(ix) control procedures, forms and documents.
(x) Appropriate records to control issues and utilization of stores in production.
(xi) Efficient system of internal audit and internal checks.
(xii) System of reporting to management regarding material purchase, storage and utilization.

(c) The following items are to be **'excluded'** for the purpose of measuring employee cost:

i. Remuneration paid to non-executive director.
ii. Cost of idle time [Hours spent as idle time × hourly rate]
iii. Variance in employee payments / costs, due to abnormal reasons (if standard costing system is followed).
iv. Any abnormal payment to an employee – which are material and quantifiable.
v. Penalties, damages paid to statutory authorities or third parties.
vi. Recoveries from employees towards benefits provided – this should be adjusted / reduced from the employee cost.
vii. Cost related to labour turnover – recruitment cost, training cost and etc.
viii. Unamortized amount related to discontinued operations.