INTERMEDIATE EXAMINATION **SET 1**

MODEL ANSWERS **TERM – DECEMBER 2025**

PAPER – 8 **SYLLABUS 2022**

COST ACCOUNTING

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

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

SECTION – A (Compulsory)

1. Choose the correct option: **[15 x 2 = 30]**

i) Which of the following best describes the difference between cost control and cost reduction?

a) Cost control is preventive; cost reduction is corrective
b) Cost control is corrective; cost reduction is preventive
c) Both are identical
d) Cost control focuses on increasing sales

ii) A customer has been ordering 90,000 special design metal columns at the rate of ₹18,000 per order during the past years The production cost comprises ₹ 120 for material, ₹ 60 for labour and ₹ 20 for fixed overheads. It costs ₹ 1,500 to set up for one run of 18,000 column and inventory carrying cost is 15% since this customer may buy at least 5,000 columns this year, the company would like to avoid making five different production runs. Find the most economic production run.

a) 2000 columns
b) 3000 columns
c) 5000 columns
d) 1000 columns

iii) During May 2025, there were 21 working days of 8 hours per day. The workforce consists of 10 employees, who all do the same work. Due to problems in the production system and a machine breakdown, 240 hours were recorded as idle time during the month. During May, the workforce produced 5,400 units of output. The expected time per unit of output is 15 minutes (= 0.25 hours). Calculate the production volume ratio.

a) 93.75%
b) 85.71%
c) 89.73%
d) 80.36%

iv) Maximum Possible Productive Capacity of a plant when no operating time is lost, it is:

a) Normal Capacity
b) Practical Capacity
c) Theoretical Capacity
d) Capacity based on Sales Expectancy

v) **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**

vi) **Under the Non- Integrated Accounting System –**
   a) **Same ledger is maintained for Cost and financial Accounts by Accountants**
   b) **Separate ledger are maintained for Cost and Financial Accounts**
   c) **All transactions relating to incomes, Expenditures, Assets and Liabilities are completely recorded**
   d) **Product-wise or department wise information is not maintained**

vii) **In Reconciliation Statement, Closing Stock undervalued in Financial Accounts is:**
   a) **Added to financial profit**
   b) **Deducted from financial profit**
   c) **Ignored**
   d) **Added to costing profit**

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) **Job Costing is used in:**
   a) **Furniture making**
   b) **Repair shops**
   c) **Printing press**
   d) **All of the above**

x) **Composite cost unit for a hospital is:**
   a) **Per day**
   b) **Per bed**
   c) **Per patient day**
   d) **Per patient**

xi) Contribution is ₹ 3,00,000 and sales is ₹ 15,00,000. Compute P/V ratio.

a) 15%
b) 20%
c) 22%
d) 17.5%

xii) If sales are ₹ 90,000 and variable cost to sales is 75%, contribution is:

a) ₹ 21,500
b) ₹ 22,500
c) ₹ 23,500
d) ₹ 67,500

xiii) In the year 2023-24, X & Co. used 2,820 kg of material at a total standard cost of 11,562. The material usage variance was 123 (Favourable). In the above case, Standard Weight of Material (SQ) for the period is _____.

a) 2,900 kg.
b) 2,648 kg.
c) 3,048 kg.
d) 2,850 kg.

xiv) _____ is the first step of budgetary system and all other budgets depends on it.

a) Cost budget
b) Sales budget
c) Production budget
d) None of the above

xv) _____ is also known as subsidiary budgets.

a) Master budget
b) Functional budget
c) Cost budget
d) None of the above

Answer:

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

Section – B

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

[5 x 14 = 70]

2. (a) An advertising agency has received an enquiry for which you are supposed to submit the quotation. Bill of material prepared by the production department for the job states the following requirement of material:

Paper 10 reams @ ₹1,800 per ream	
Ink and other printing material	**₹ 5,000**
Binding material & other consumables	**₹ 3,000**

Some photography is required for the job. The agency does not have a photographer as an employee. It decides to hire one by paying ₹10,000 to him. Estimated job card prepared by production department specifies that service of following employees will be required for this job:

Artist (₹12,000 per month)	**80 hours**
Copywriter (₹10,000 per month)	**75 hours**
Client servicing (₹9,000 per month)	**30 hours**

The primary packing material will be required to the tune of ₹4,000. Production Overheads 40% of direct cost, while the Selling & Distribution Overheads are likely to be 25% on Production Cost. The agency expects a profit of 20% on the quoted price. The agency works 25 days in a month and 6 hours a day. Illustrate a detailed Statement of Profit showing the Quotation Price for the job, along with suitable working notes. [7]

(b) From the details given below, calculate:

i. **EOQ**
ii. **Re-ordering Level**
iii. **Maximum Level**
iv. **Minimum Level**

Re-ordering quantity is to be calculated on the basis of following information:

a. **Cost of placing a purchase order is ₹ 20**
b. **Number of units to be purchased during the year 5,000**
c. **Purchase price per unit inclusive of transportation cost is ₹ 50**
d. **Annual cost of storage per unit is ₹ 5**
e. **Details of lead time: Average 10 days, Maximum 15 days, Minimum 6 days. For emergency purchases 4 days**
f. **Rate of consumption: Average: 15 units per day Maximum: 20 units per day [7]**

Answer:

(a) Quotation for a Printing Job

Items	**Amount (₹)**	**Amount (₹)**
Direct Material		
Paper	10 ×1,800 = 18,000	
Ink and other printing material	5,000	
Binding material & consumables	3,000	
Primary packing material	4,000	30,000
Direct Labour		
Photographer's Charge	10,000	
Artist (WN 1)	6,400	
Copywriter (WN 2)	5,000	
Client Servicing (WN 3)	1,800	23,200
Prime Cost		**53,200**
Add: Production Overhead	40% × 53,200	21,280
Factory Cost		**74,480**
Add: Selling & Distribution Overhead	25% × 74,480	18,620
Cost of Sales		**93,100**
Add: Profit (WN 4)		23,275
Price to be quoted		**1,16,375**

Working Notes:

1. Charge per month ₹ 12,000

Working Hours per month (25 × 6) 150 hours

Actual Hours worked 80

∴ Labour charge for Artist = $12{,}000 \times \frac{80}{150}$ = ₹ 6,400

2. Charge per month ₹ 10,000

Working Hours per month (25 × 6) 150 hours

Actual Hours worked 75

∴ Labour charge for Copywriter = $10{,}000 \times \frac{75}{150}$ = ₹ 5,000

3. Charge per month ₹ 9,000

Working Hours per month (25 x 6) 150 hours

Actual Hours worked 30

∴ Labour charge for Client servicing = $9{,}000 \times \frac{30}{150}$ =₹ 1,800

4. Cost of Sales + Profit = Price to be quoted

or, 93,100 + 20% × Price to be quoted = Price to be quoted

or, Price to be quoted = 93,100 $\times\frac{100}{80}$ =₹ 1,16,375

Profit = 1,16,375 – 93,100 = ₹23,275

(b) **(i)** EOQ = $\sqrt{\frac{2AO}{c}}$

A = Annual Consumption = 5,000 units
O = Ordering Cost = ₹ 20
C = Carrying Cost per unit per annum =₹ 5

EOQ = $\sqrt{\frac{2\times5000\times20}{5}}$ = 200 units

Reordering Quantity = EOQ = 200 units

(ii) Re-order Level = Maximum Usage × Maximum Re-order period
= 20 × 15 = 300 units

(iii) Maximum Level = Re-order Level + Re-order Quantity – (Min. Usage × Min. Re-order period)
= 300 + 200 – (10 × 6) = 440 units

$(Average\ usage = \frac{Minimum\ Usage+Maximum\ Usage}{2})$

Or, 15 = $\frac{Minimum\ Usage+20}{2}$

(or, Minimum Usage = (15 × 2) - 20 = 10 units)

(iv) Minimum Level = Re-order Level – (Average Usage × Average Re-order period)

= 300 – (15 × 10) = 150 units

3. (a) The following particulars relate to a processing machine treating a typical material. You are required to calculate the machine hour rate.

The cost of the machine	**₹ 10,000**
Estimated life	**10 years**
Scrap value	**₹ 1,000**
Working time (50 weeks of 44 hours each)	**2,200 hours**
Machine maintenance per annum	**200 hours**

Setting up time estimated @ 5% of total productive time	
Electricity is 16 units per hour @ 10 paise per unit.	
Chemical required weekly	₹ 20
Maintenance cost per year	₹ 1,200

Two attendants control the operations of the machine together with 6 other machines, their combined weekly wages are ₹ 140. Departmental overheads allocated to this machine per annum ₹ 2,000. [7]

(b) During a particular year, the auditors certified the financial accounts, showing profit of ₹ 1,68,000 whereas the same, as per costing books was coming out to be ₹ 2,40,000. Given the following information you are asked to prepare a Reconciliation Statement showing the reasons for the gap.

Trading and Profit & Loss Account

Particulars	Amount (₹)	Particulars	Amount (₹)
To Opening stock A/c	8,20,000	By Sales A/c	34,65,000
To Purchases A/c	24,72,000	By Closing stock A/c	7,50,000
To Direct wages A/c	2,30,000		
To Factory overheads A/c	2,10,000		
To Gross Profit c/d	4,83,000		
	42,15,000		42,15,000
To Administration Expenses A/c	95,000	By Gross Profit b/d	4,83,000
To Selling Expenses A/c	2,25,000	By Sundry Income A/c	5,000
To Net Profit	1,68,000		
	4,88,000		4,88,000

The costing records show:

i. Book value of closing stock ₹ 7,80,000.

ii. Factory overheads have been absorbed to the extent of ₹ 1,89,800.

iii. Sundry income is not considered.

iv. Total absorption of direct wages ₹ 2,46,000.

v. Administration expense are covered at 3% of selling price.

vi. Selling prices include 5% for selling expenses. [7]

Answer:

(a) Annual working hours = 50 weeks × 44 hours = 2,200

Less: Maintenance time 200

Production hours 2,000

Less: Setting up time 5% x 2,000 =100

Effective hours 1,900

Computation of Machine Hour Rate

Particulars		Amount (₹)	Amount (₹) Rate per hour
Standing Charges			
Chemical Solution	50 weeks × ₹ 20	1,000	
Attendants Wage	₹140 × 50 × $\frac{1}{7}$	1,000	
Departmental Overheads		2,000	
Total Standing Charges		4,000	
Machine Rate per hour for Standing Charges		$\frac{₹\ 4,000}{2,200\ hours}$	1.82
Machine Expenses			
Depreciation	$\frac{₹10,000 - ₹1,000}{10\ years}$	900	$\frac{₹\ 900}{1,900\ Hours}$ = 0.47
Maintenance Cost		1,200	$\frac{₹\ 1200}{1,900\ Hours}$ = 0.63
Power	16 units x ₹ 0.10		1.60
Machine Hour Rate			4.52

(b) Statement showing Reconciliation of Profit shown by Cost and Financial Accounts

	Amount (₹)	Amount (₹)
Profit as per Financial Accounts		1,68,000
Add: Over Valuation of Closing Stock as per Cost Accounts (7,80,000 – 7,50,000)	30,000	
Under recovery of factory overhead (2,10,000 – 1,89,800)	20,200	
Under recovery of Selling Expenses in Cost Accounts (2,25,000 – 5% x 34,65,000) = (2,25,000 – 1,73,250)	51,750	1,01,950
Less: Sundry Income not considered in Cost Accounts	5,000	2,69,950
Over recovery of wages in cost accounts		

(2,46,000 – 2,30,000)	16,000	
Over recovery of administration expenses in cost accounts (3% x 34,65,000 – 95,000) = (1,03,950 – 95,000)	8,950	29,950
Profit as per Cost Accounts		**2,40,000**

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 2025.

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 the cost per passenger kilo meter. [7]

(b) NIRVANA LTD. undertook a contract for ₹50,00,000 on 1st April, 2024. On 31st March, 2025 when the accounts of the company were closed, the following details about the contract were gathered:

Particulars	Amount (₹)
Materials purchased	10,00,000
Wages paid	4,50,000
General expenses	1,00,000
Plant purchased	5,00,000
Materials on hand on 31.03.2025	2,50,000
Wages accrued on 31.03.2025	50,000
Work certified	20,00,000
Cash received	15,00,000
Work uncertified	1,50,000
Depreciation of plant	50,000

The above contract contained an escalation clause which read as follows:

"In the event of prices of materials and rates of wages increase by more than 5%, the contract price would be increased accordingly by 25% of the rise in the cost of materials and wages beyond 5% in each case." It was found that since the date of signing the agreement, the price of materials and wage rates increased by 25%. The value of work certified does not take into account the effect of the above clause.

Required:

Prepare Contract Account of the company as on 31st March, 2025. **[7]**

Answer:

(a) Operating Cost Statement for the month of April 2022

Particulars	Amount (₹)	Amount (₹)
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	80000	
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 kilometres × 50 passengers × 75% × 30 days × 2 = 5,62,500 passenger-kms

(b)

Dr. Contract Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To Materials A/c (Purchased)	10,00,000	By Cost of Construction c/d	14,00,000
To Wages A/c	4,50,000	By Balance c/d	2,50,000
To Outstanding Wages A/c	50,000		
To General Expenses A/c	1,00,000		
To Depreciation on Plant A/c	50,000		

	16,50,000		**16,50,000**
To Cost of Construction b/d	14,00,000		
To Notional Profit c/d (Bal. fig.)	8,00,000	By Work in Progress A/c	
		- Value of Work Certified	20,00,000
		- Escalation [WN-1]	50,000
		- Cost of Uncertified Work	1,50,000
	22,00,000		**22,00,000**
		By Notional Profit b/d	8,00,000
To Profit & Loss A/c [WN-2]	2,00,000		
To Work in Progress A/c			
- Provision for Contingencies (Bal. fig.)	6,00,000		
	8,00,000		**8,00,000**

Working Notes:

1. Increase in Contract Price due to Escalation in the Prices of Materials and Labour

Cost of Materials and Labour incurred = 10,00,000 + 4,50,000 + 50,000 – 2,50,000 = ₹ 12,50,000

Increase in prices of Materials and Labour by 25%

So, Cost of Materials and Labour before increase in Prices = $12,50,000 \times \frac{100}{125}$ = ₹10,00,000

Increase in Contract Price (beyond 5% increase) = $\frac{25}{100} \times (12,50,000 - 10,00,000 \times \frac{105}{100})$

$= \frac{25}{100} \times (12,50,000 - 10,50,000)$

= ₹ 50,000

2. Amount to be transferred to Profit & Loss A/c = $\frac{1}{3} \times 8,00,000 \times \frac{15,00,000}{20,00,000}$ =₹ 2,00,000

5. (a) The product of a manufacturing unit passes through two distinct processes. From the past experience the incidence of wastage is ascertained as under:

Process A 2%
Process B 10%

In each case the percentage of wastage is computed on the number of units entering the process concerned. The sales realisation of wastage in Process A and Process B are ₹ 25 per 100 units and ₹ 50 per 100 units respectively.

The following information is obtained for the month of April, 2025; 40,000 units of crude material were introduced in Process A at a cost of ₹ 16,000.

Particulars	Process A	Process B
	Amount (₹)	Amount (₹)
Other Materials	16,000	5,000
Direct Labour	9,000	8,000
Direct Expenses	8,200	1,500

	Units	Units
Output	**39,000**	**36,500**
Finished Product Stock:		
April 1	**6,000**	**5,000**
April 30	**5,000**	**8,000**
Value of stock per unit on April 1st	**₹ 1.20**	**₹ 1.60**

Stocks are valued and transferred to subsequent process at weighted average costs. Prepare respective Process Accounts and Stock Accounts. [7]

(b) The standard cost of a certain chemical mixture is as under:
40% of Material A at ₹ 20 per kg. 60% of Material B at ₹ 30 per kg. A standard loss of 10% is expected in production. The following actual cost data is given for the period:
180 kg material A at a cost of ₹ 18 per kg
220 kg material B at a cost of ₹ 34 per kg
The weight produced is 360 kg.
Calculate and present:
i. Material Cost Variance
ii. Material Price Variance
iii. Material Usage Variance
iv. Material Mix Variance
v. Material Yield Variance [7]

Answer:
(a)

Dr. Process A Account Cr.

Particulars	Units	Rate (₹)	Amount (₹)	Particulars	Units	Rate (₹)	Amount (₹)
To Material (Introduced) A/c	40,000	0.40	16,000	By Normal Loss A/c	800	0.25	200
To Material (Additional) A/c	-	-	16,000	By Balance c/d	39,200	1.25	49,000
To Direct Labour A/c	-	-	9,000				
To Direct Expenses A/c	-	-	8,200				
Total	40,000		49,200	Total	40,000		49,200
To Balance b/d	39,200	1.25	49,000	By Abnormal Loss A/c	200	1.25	250
				By Process A Finished Stock A/c	39,000	1.25	48,750
Total	39,200		49,000	Total	39,200		49,000

Dr. Process A Finished Stock Account Cr.

Particulars	Units	Rate (₹)	Amount (₹)	Particulars	Units	Rate (₹)	Amount (₹)
To Opening Stock A/c	6,000	1.20	7,200	By Process B A/c	40,000	1.243	49,733
To Process A A/c	39,000	1.25	48,750	By Closing Stock A/c	5,000	1.243	6,217

Total	45,000		55,950	Total	45,000		55,950

Dr. Process B Account Cr.

Particulars	Units	Rate (₹)	Amount (₹)	Particulars	Units	Rate (₹)	Amount (₹)
To Process A Finished Stock A/c	40,000	1.243	49,733	By Normal Loss A/c	4,000	0.50	2,000
To Other Material A/c	-	-	5,000	By Balance c/d	36,000	1.7287	62,233
To Direct Labour A/c	-	-	8,000				
To Direct Expenses A/c	-	-	1,500				
Total	40,000		64,233	Total	40,000		64,233
To Balance b/d	36,000	1.7287	62,233	By Process B Finished Stock A/c	36,500	1.7287	63,097
To Abnormal Gain A/c	500	1.7287	864				
Total	36,500		63,097		Total	36,500	63,097

Dr. Process B Finished Stock Account Cr.

Particulars	Units	Rate (₹)	Amount (₹)	Particulars	Units	Rate (₹)	Amount (₹)
To Opening Stock A/c	5,000	1.60	8,000	By Finished Stock A/c (or transfer to next process)	33,500	1.713	57,392
To Process B A/c	36,500	1.7287	63,097	By Closing Stock A/c	8,000	1.713	13,705
Total	41,500		71,097	Total	41,500		71,097

(b)

Particulars	**Standard**		**Actual**	
	Quantity (Kg)	**Rate (₹)**	**Quantity (Kg)**	**Rate (₹)**
Material A	40	20	180	18
Material B	60	30	220	34
Total	100	—	400	—
Less: Loss	10	—	40(Bal.fig.)	—
Output	90	—	360	—

1. SQ – Standard Quantity for Actual Output

$$\text{Material A} = \frac{40}{90} \times 360 = 160 \text{ kg}$$

$$\text{Material B} = \frac{60}{90} \times 360 = 240 \text{ kg}$$

2. SP – Standard Price per unit

Material A = ₹ 20, Material B = ₹ 30

3. AQ – Actual Quantity

Material A= 180kg, Material B = 220kg

4. AP – Actual Price per unit

Material A = ₹ 18, Material B = ₹ 34

5. RSQ – Revised Standard Quantity for Actual Input

Material A = $\frac{40}{100} \times 400 = 160$ kg

$$\text{Material B} = \frac{60}{100} \times 400 = 240 \text{ kg}$$

6. Material Cost Variance

Material Cost Variance $= (SQ \times SP) - (AQ \times AP)$

MaterialA=$160 \times 20 - 180 \times 18 = 3,200 - 3,240 =$ ₹$40(A)$

Material B = $240 \times 30 - 220 \times 34 = 7,200 - 7,480 =$ ₹$280(A)$

=₹320(A)

7. Material Price Variance

Material Price Variance $= (SP - AP) \times AQ$

MaterialA=$(20 - 18) \times 180 =$ ₹$360(F)$

Material B = $(30 - 34) \times 220 =$ ₹$880(A)$

= ₹520 (A)

8. Material Usage Variance

Material Usage Variance $= (SQ - AQ) \times SP$

MaterialA=$(160 - 180) \times 20 =$ ₹$400(A)$

Material B = $(240 - 220) \times 30 =$ ₹$600(F)$

= ₹200 (F)

9. Material Mix Variance

Material Mix Variance $= (RSQ - AQ) \times SP$

MaterialA=$(160 - 180) \times 20 =$ ₹$400(A)$

Material B = $(240 - 220) \times 30 =$ ₹$600(F)$

= ₹200 (F)

10. Material Yield Variance

Material Yield Variance $= (SQ - RSQ) \times SP$

MaterialA=$(\mathbf{160 - 160}) \times \mathbf{20} =$ Nil
Material B = $(\mathbf{240 - 240}) \times \mathbf{30} =$ Nil

6. (a) The sports material manufacturing company budgeted the following data for the coming year:

	Amount (₹)
Sales (1,00,000 units)	1,00,000
Variable cost	40,000
Fixed cost	50,000

Calculate:
(I) P/V Ratio, BEP and Margin of Safety
(II) Evaluate the effect of:
(i) 20% increase in physical sales volume
(ii) 5% decrease in variable costs
(iii) 10% increase in fixed costs
(iv) ₹ 5,000 variable cost decrease accompanied by ₹ 15,000 increase in fixed costs. **[7]**

(b) The following particulars are extracted from the records of a company:

Particular		Per Unit	
		Product A	Product B
Sales	₹	100	120
Consumption of Material		2 kg	3 kg
Material cost	₹	10	15
Direct wages cost	₹	15	10
Direct expenses	₹	5	6
Machine hours used		3 hours	2 hours
Overheads expenses			
Fixed	₹	5	10
Variable	₹	15	20
Direct wages per hour is ₹ 5			

i. Comment on profitability of each product (both use the same raw material) when:
1. **Total sales potential in units is limited;**
2. **Total sales potential in value is limited;**
3. **Raw material is in short supply;**
4. **Production capacity (in terms of machine hours) is the limiting factor.**

ii. Assuming raw material as the key factor, availability of which is 10,000 kgs and each product cannot be sold more than 3,500 units, prepare the product mix which will yield the maximum profit. **[7]**

Answer:
(a) (I) **Income Statement**

Particulars	Amount (₹)
Sales (1,00,000 × ₹1 per unit)	1,00,000
Less: Variable Cost (1,00,000 × ₹0.40)	40,000
Contribution	60,000
Less: Fixed Cost	50,000
Profit	10,000

$$P/V\ Ratio = \frac{60,000}{1,00,000} \times 100 = 60\%$$

$$B.E.\ Sales = \frac{₹50,000}{60\%} = ₹83,000$$

$$\text{Margin of Safety} = \text{Sales} - \text{B. E. P. Sales} = ₹1,00,000 - ₹83,333 = ₹16,667$$

(II)

	Income Statement	**P/V Ratio**	**BE Sales**	**MOS**
(i) Increase in volume by 20%	₹ Sales(1,20,000×1)1,20,000 Less: VC (1,20,000×0.4) 48,000 Contribution 72,000 FC 50,000	$=\frac{72,000}{1,20,000}\times 100$ =60%	$\frac{50,000}{60\%}$ = ₹ 83,333	=1,20,000-83,333 =₹36,667
(ii)5%Decrease in Variable Cost	₹ Sales(1,00,000×1)1,00,000 Less: VC (1,00,000 × 0.38) 38,000 Contribution 62,000 FC 50,000	$=\frac{62,000}{1,00,000}\times 100$ =62%	$=\frac{50,000}{62\%}$ =₹80,645	=1,00,000-80,645 =₹19,355
(iii) 10% Increase in Fixed Cost	₹ Sales(1,00,000×1)1,00,000 Less: VC (1,00,000 × 0.40) 40,000 Contribution 60,000 FC 55,000	$=\frac{60,000}{1,00,000}\times 100$ = 60%	$=\frac{55,000}{60\%}$ = ₹ 91,667	=1,00,000 -91,667 = ₹ 8,333
(iv) ₹5,000variable cost decrease accompanied by ₹15,000 increase in fixed cost	₹ Sales(1,00,000×1) 1,00,000 Less: VC (40,000 - 5,000) 35,000 Contribution 65,000 FC 65,000	$=\frac{65,000}{1,00,000}\times 100$ = 65%	$=\frac{65,000}{65\%}$ = ₹ 1,00,000	=1,00,000–1,00,000 = ₹ Nil

(b) (i) Statement showing computation of contribution per unit of different factors of production and determination of profitability.

Sl. No.	Particulars	Product A (₹)	Product B (₹)

i.	**Selling price per unit**	**100**	**120**
ii.	Variable Cost per unit Material Labour Direct expenses **Variable overhead**	 10 15 5 **15**	 15 10 6 **20**
iii.	Total Variable Cost per unit	45	51
iv.	Contribution per unit (i. – iii.)	55	69
v.	P/V Ratio = $\frac{\text{contriution per unit}}{\text{selling price per unit}}$	55%	57.50%
vi.	Contribution per kg of material	₹ 55 / 2kg = **₹ 27.50**	₹ 69 /3kg = **₹ 23**
vii.	Contribution per machine hour	₹55 / 3 hours = **₹ 18.33**	₹ 69 / 2 hours = **₹ 34.50**

From the above computation, we may comment upon the profitability in the following manner:
1. If total sales potential in units is limited, Product B is more profitable, it has more contribution per unit.
2. If total sales potential in value is limited, Product B is more profitable, because it has higher P/V Ratio.
3. If the raw material is in short supply, Product A is more profitable, because it has more contribution per kg of material.
4. If the production capacity is limited, Product B is more profitable, because it has more contribution per machine hour.

(ii) Statement showing optimum product mix – when raw material is a limiting factor

Sl. No.	Particulars	Product A	Product B	Total
i.	No. of units	3,500	1,000	
		(₹)	(₹)	(₹)
ii.	Contribution per unit	55	69	
iii.	Total contribution	1,92,500	69,000	2,61,500
iv.	Fixed cost	3,500 × 5 = 17,500	#3,500 × 10 = 35,000	52,500
v.	Profit (iii. – iv.)			2,09,000

Fixed cost is taken at maximum capacity

Working Notes

Available Material		10,000 kgs
Less: Utilized for Product A	(3,500 units × 2 kg/unit)	7,000 kgs
Balance quantity available for Production of Product B		3,000 kgs

Number of units of Production of Product B = $\frac{3000 \text{ kg}}{3 \text{ kg per unit}}$ = 1,000 units

7. (a) A factory engaged in manufacturing plastic toys is working at 40% capacity and produces 10,000 toys per month. The present cost break up for one toy is as under:

Material : ₹ 10
Labour : ₹ 3
Overheads : ₹ 5 [60% fixed]
The selling price is ₹ 20 per toy.

If it is decided to work the factory at 50% capacity, the selling price falls by 3%, at 90% capacity, the selling price falls by 5% accompanied by a similar fall in the price of material. You are required to prepare a statement showing the profits/losses at 40%, 50% and 90% capacity utilizations. [7]

(b) Explain the objectives and functions of Cost Accounting Standards Board. [7]

Answer:

(a)

Flexible Budget
At 40%, 50% and 90% Capacity Utilization

Particulars	40% Capacity Utilization	50% Capacity Utilization	90% Capacity Utilization
Production - Units	**10,000**	**12,500**	**22,500**
Selling Price Per Unit	₹20	₹ 19.40	₹ 19
Sales Value [units × selling price]	₹ 2,00,000	₹ 2,42,500	₹ 4,27,500
Variable Costs:			
Material ₹ 10 per unit	₹ 1,00,000	₹ 1,21,250*	₹2,13,750**
Labour ₹ 3 per unit	₹ 30,000	₹ 37,500	₹ 67,500
Overheads ₹ 2 per unit (₹ 5 ×40%)	₹ 20,000	₹25,000	₹45,000
Total Variable Costs	₹ 1,50,000	₹ 1,83,750	₹ 3,26,250
Fixed Costs (₹ 5 × 60% × 10,000)	₹ 30,000	₹ 30,000	₹ 30,000
Total Costs [Variable Cost + Fixed Cost]	₹1,80,000	₹ 2,13,750	₹ 3,56,250
Profit/Loss [Sales – Total Costs]	₹ 20,000	₹ 28,750	₹ 71,250

***** 12,500 units × ₹ 9.70 per unit = ₹ 1,21,500
** 22,500 units × ₹ 9.50 per unit = ₹ 2,13,750

(b) The objectives of the CASB are to develop high quality Cost Accounting Standards to enable the management to take informed decisions and to enable regulators to function more effectively by Integrating, harmonizing, and standardizing cost accounting principles and practices.

The following are the specific functions of the CASB:

1. To issue the framework for the Cost Accounting Standards.
2. To equip the Cost and Management Accounting professionals with better guidelines on Cost Accounting Practices.
3. To assist the members in preparation of uniform cost statements under various statutes.
4. To provide from time-to-time interpretations on Cost Accounting Standards.
5. To issue application guidance relating to a particular standard.
6. To propagate the Cost Accounting Standards and to persuade the users to adopt them in the preparation and presentation of General-Purpose Cost Statement.
7. To persuade the Government and appropriate authorities to enforce Cost Accounting Standards, to facilitate the adoption thereof, by industry and corporate entities in order to achieve the desired objectives of standardization of Cost Accounting practices.
8. To educate the users about the utility and need for compliance of cost accounting standards.

8. Short Questions:

(a) Distinguish between Financial Accounting and Cost Accounting. [4]

(b) The rising labour turnover presents a dual challenge, adversely affecting both workforce productivity and leading to increased costs. Discuss the costs associated with labour turnover. [5]

(c) Discuss the advantages of Job Costing. [5]

Answer:

(a)

Basis of Comparison	Financial Accounting	Cost Accounting
Purpose	It is prepared for providing information about the results of the business activities as a whole for a particular period to the users.	The main purpose of Cost Accounting is to provide information to the management for the proper planning, control and decision making.
Need	Financial Accounts are maintained as per the requirements of Companies Act and Income Tax Act.	Cost accounts are maintained to meet the requirement of the Management.
Recording	Transactions are classified, recorded and analysed subjectively.	In cost accounting, transactions are classified, recorded and analysed objectively according to the purpose for which costs are incurred.
Analysis of profit	Financial accounting reveals the profit of a business as a whole.	Cost Accounting shows the profit made on each product, job or process.
Accounting period	Financial accounts are prepared for a definite period.	Cost reports are prepared frequently and submitted to the management according to their requirement which may be daily, weekly, etc.

Stock valuation	In financial accounts, stocks are valued as per the relevant Accounting Standard (for example, AS 2 specifies that closing inventory should be valued at cost [carrying amount] or net realisable value whichever is lower.	Cost accounting stocks are valued at cost
Relative Efficiency	Financial accounts do not reveal the relative efficiency of each department or section.	Cost account provides information on the relative efficiencies of various plant and Machinery

(b) Cost of labour turnover:

The rising labour turnover presents a dual challenge, adversely affecting both workforce productivity and leading to increased costs. The costs associated with labour turnover can be categorized into two main groups:

• **Preventive Costs** – Preventive Costs refer to the expenditures incurred by an organization with the primary objective of maintaining worker satisfaction and discouraging employees from leaving their employment. These costs are essentially investments made to create a positive work environment, foster employee engagement, and address factors that might contribute to high turnover. Examples of preventive costs include:

a. Employee Benefits: Offering attractive benefits such as health insurance, retirement plans, and wellness programs to enhance job satisfaction and loyalty.

b. Training and Development: Providing ongoing training and development opportunities to enhance employee skills, job satisfaction, and career growth, making them more likely to stay with the organization.

c. Workplace Wellness Programs: Implementing initiatives to support the well-being of employees, both physically and mentally, contributing to overall job satisfaction and reducing the likelihood of turnover.

d. Competitive Compensation: Ensuring that salaries and other forms of compensation are competitive within the industry, preventing employees from seeking better-paying opportunities elsewhere.

e. Employee Recognition Programs: Acknowledging and rewarding employees for their contributions, fostering a positive work culture and reinforcing their sense of value within the organization.

By investing in these preventive measures, organizations aim to create a workplace that employees find fulfilling and satisfying, reducing the inclination to leave for better opportunities.

(c) Advantages of Job Costing

Job costing offers the following advantages:

(a) The cost of material, labour and overhead for every job or product in a department is available daily, weekly or as often as required while the job is still in progress.

(b) On completion of a job, the cost under each element is immediately ascertained. Costs may be compared with the selling prices of the products in order to determine their profitability and to decide which product lines should be pushed or discontinued.

(c) Historical costs for past periods for each product, compiled by orders, departments or machines, provide useful statistics for future production planning and for estimating the costs of similar jobs to be taken up in future. This assists in the prompt furnishing of price quotations for specific jobs.

(d) The adoption of predetermined overhead rates in job costing necessitates the application of a system of budgetary control of overhead with all its advantages.

(e) The actual overhead costs are compared with the overhead applied at predetermined rates; thus, at the end of an accounting period, overhead variances can be analysed.

(f) Spoilage and defective work can be easily identified with specific job or product

(g) Job costing is particularly suitable for cost plus and such other contracts where selling price is determined directly on the basis of costs.