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SUGGESTED SOLUTION

INTERMEDIATE M'19 EXAM

SUBJECT- COSTING

Test Code – CIN 5023

(Date :)

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ANSWER-1

ANSWER-A (5 MARKS)

Statement of cost per batch and per order

No. of batch = 600 units ÷ 50 units = 12 batches

	Particulars	Cost per batch (Rs.)	Total Cost (Rs.)
	Direct Material Cost	5,000.00	60,000
	Direct Wages	500.00	6,000
	Oven set-up cost	750.00	9,000
	Add: Production Overheads (20% of Direct wages)	100.00	1,200
	Total Production cost	6,350.00	76,200
	Add: S&D and Administration overheads (10% of Total production cost)	635.00	7,620
	Total Cost	6,985.00	83,820
	Add: Profit (1/3rd of total cost)	2,328.33	27,940
(i)	**Sales price**	**9,313.33**	**1,11,760**
	No. of units in batch	50 units	
(ii)	**Cost per unit** (Rs.6,985 ÷ 50 units)	**139.70**	
	Selling price per unit (9,313.33 ÷ 50 units)	**186.27**	

(iii) If the order is for 605 cakes, then selling price per cake would be as below:

Particulars	Total Cost (Rs.)
Direct Material Cost	60,500
Direct Wages	6,050
Oven set-up cost	9,750
Add: Production Overheads (20% of Direct wages)	1,210
Total Production cost	77,510
Add: S&D and Administration overheads (10% of Total production cost)	7,751
Total Cost	85,261
Add: Profit (1/3rd of total cost)	28,420
Sales price	**1,13,681**
No. of units	605 units
Selling price per unit (Rs.1,13,681 ÷ 605 units)	**187.90**

ANSWER-B **(5 MARKS)**

(1) Comparative Profitability Statements

Particulars	Process- A (Rs.)	Process- B (Rs.)
Selling Price per unit	20.00	20.00
Less: Variable Cost per unit	12.00	14.00
Contribution per unit	8.00	6.00
Total Contribution	32,00,000 (Rs. 8 × 4,00,000)	24,00,000 (Rs. 6 × 4,00,000)
Less: Total fixed costs	30,00,000	21,00,000
Profit	2,00,000	3,00,000
***Capacity (units)	4,30,000	5,00,000
Total Contribution at full capacity	34,40,000 (Rs. 8 × 4,30,000)	30,00,000 (Rs. 6 × 5,00,000)
Fixed Cost	30,00,000	21,00,000
Profit	4,40,000	9,00,000

Process- B should be chosen as it gives more profit as compared to Process-A.

Particulars	Process- A (Rs.)	Process- B (Rs.)
***Capacity (units)	6,00,000	5,00,000
Total contribution	48,00,000 (Rs. 8 × 6,00,000)	30,00,000 (Rs. 6 × 5,00,000)
Fixed Cost	30,00,000	21,00,000
Profit	18,00,000	9,00,000

If the capacity of the Process A and B is 6,00,000 units and 5,00,000 units respectively then Process-A is giving double profit than Process C. Thus Process A be chosen.

*Note: It is assumed that capacity produced equals sales

ANSWER-C **(5 MARKS)**

We know that S – V = F + P (S - Sales, V - Variable cost, F - Fixed cost and P - Profit/loss)

Suppose variable cost = x per unit

Fixed Cost = y

When sales is 8,000 units, then

15 X 8,000 - 8,000 x = y - 40,000..... (1)

When sales volume raised to 20,000 units, then

15 X 20,000 - 20,000 x = y + 80,000..... (2)

Or, 1,20,000 – 8,000 x = y – 40,000..... (3)

And 3,00,000 – 20,000 x = y + 80,000..... (4)

From (3) & (4) we get x = Rs. 5. Variable cost per unit = Rs. 5 Putting this value in 3rd equation: 1,20,000 – (8,000 X 5) = y 40,000

or y = Rs. 1,20,000

Fixed Cost = Rs. 1,20,000

P/V ratio = $\frac{S-V}{S}$ = $\frac{15-5}{15}$ × 100 = $\frac{200}{3}$ = $66\frac{2}{3}$%

Suppose break-even sales = x

15x – 5x = 1,20,000 (at BEP, contribution will be equal to fixed cost)

x = 12,000 units.

Or Break-even sales in units = 12,000

Break-even sales in rupees = 12,000 X Rs. 15 = Rs. 1,80,000

ANSWER-D **(5 MARKS)**

(i) EOQ = $\sqrt{\frac{2ab}{CS}}$

where

a = Annual consumption

b — Buying cost per order

C =Cost per unit

S = Storage and other inventory carrying cost rate

EOQ for Super Grow	EOQ for Nature's Own
EOQ = $\sqrt{\frac{2 \text{ x } 2{,}000 \text{ x } 1{,}200}{480}}$	EOQ = $\sqrt{\frac{2 \text{ x } 1{,}280 \text{ x } 1{,}400}{560}}$
= $\sqrt{10{,}000}$ or 100 bags	= $\sqrt{6{,}400}$ or 80 bags

(ii) Total annual relevant cost for Super Grow Fertilizer

= Total annual relevant ordering costs + Total annual relevant carrying cost

= (1,200/100) x 2,000 + ½ x 100 bags x 480

= Rs. 24,000 + Rs. 24,000 = Rs. 48,000

Total annual relevant costs for Nature's Own Fertilizer

= Total annual relevant ordering costs + Total annual relevant carrying costs

= (1,400/80) x 1,280 bags + ½ x 80 bags x Rs. 560

= Rs. 22,400 + Rs. 22,400 = Rs. 44,800

(iii) Number of deliveries for Super Grow Fertilizer per year

$$= \frac{\text{Annual Demand of Fertilizer bags}}{EOQ}$$

= 2,000 bags/100 bags = 20 orders

Number of deliveries for Nature's Own Fertilizer per year

= 1,280 bags/80 bags =16 orders

ANSWER-2

ANSWER-A

Workings:

Preparation of Cost Sheet/ Cost Statement

Particulars	**Amount (Rs.)**
Materials	26,80,000
Wages	17,80,000
Prime Cost	44,60,000
Add: Factory expenses (20% of Rs. 44,60,000)	8,92,000
Factory Cost	53,52,000
Add: Administrative expenses (10% of Rs. 53,52,000)	5,35,200
Cost of Production	58,87,200
Less: Closing Stock $\frac{Rs.5887200}{52000\ units} \times 2000\ units$	(2,26,431)
Cost of Goods Sold	56,60,769
Add: Selling expenses (Rs.10 × 50,000 units)	5,00,000
Cost of Sales	61,60,769
Profit (Balancing figure)	39,231
Sales Value	62,00,000

(5 MARKS)

Costing Profit and Loss Account

Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To Materials	26,80,000	By Sales	62,00,000
To Wages	17,80,000	By Closing stock	2,26,431
To Factory expenses	8,92,000		
To Administrative expenses	5,35,200		
To Selling expenses	5,00,000		
To Profit (Balancing figure)	39,231		

	64,26,431		64,26,431

(2 MARKS)

Reconciliation of profit as per Cost Accounts and as per Financial Accounts

Particulars	Amount (Rs.)
Profit as per Cost Accounts	39,231
Additions:	
Administrative expenses (Over-absorbed) (Rs. 5,35,200 – Rs.4,80,200)	55,000
Selling expenses (Overcharged) (Rs. 5,00,000 – Rs. 2,50,000)	2,50,000
Dividend received	20,000
	3,64,231
Deductions:	
Factory expenses (Under -absorbed) (Rs. 9,50,000 – 8,92,000)	58,000
Closing stock (Over-valued) (Rs.2,26,431 – Rs. 1,50,000)	76,431
Preliminary expenses written off	50,000
	1,84,431
Profit as per Financial Accounts	1,79,800

(Reconciliation statement may also be prepared by taking financial profit as base.)

(3 MARKS)

ANSWER-B

Working Notes:

1. (i) Effective hours for standing charges (208 hours – 8 hours) = 200 hours
   (ii) Effective hours for variable costs (208 hours – 28 hours) = 180 hours

Standing Charges per hour

	Cost per month (Rs.)	Cost per hour (Rs.) (Cost per month ÷ 200 hours)
Supervisor's salary $\left(\frac{Rs.6000}{3\ machines}\right)$	2,000	10.00

Rent of building $\left(\frac{1}{6} \times \frac{Rs.72000}{12\ months}\right)$	1,000	5.00
General lighting	1,000	5.00
Total Standing Charges	4,000	20.00

(3 MARKS)

Machine running expenses per hour

	Cost per month (Rs.)	Cost per hour (Rs.)
Depreciation $\left(\frac{\text{Rs. 50000} - \text{Rs. 20000}}{\text{10 years}} \times \frac{1}{\text{12 months}}\right)$	4,000	20.00 $\left(\frac{\text{Rs. 4000}}{\text{200 hours}}\right)$
Wages	2,500	12.50 $\left(\frac{\text{Rs. 2500}}{\text{200 hours}}\right)$
Repairs & Maintenance $\left(\frac{\text{Rs. 60480}}{\text{12 months}}\right)$	5,040	28.00 $\left(\frac{\text{Rs. 5040}}{\text{180 hours}}\right)$
Consumable stores $\left(\frac{\text{Rs. 47520}}{\text{12 months}}\right)$	3,960	22.00 $\left(\frac{\text{Rs. 3960}}{\text{180 hours}}\right)$
Power (25 units × Rs.2 × 180 hours)	9,000	50.00
Total Machine Expenses	24,500	132.50

(4 MARKS)

Computation of Two – tier machine hour rate

	Set up time rate per machine hour (Rs.)	Running time rate per machine hour (Rs.)
Standing Charges	20.00	20.00
Machine expenses **:**		

Depreciation	20.00	20.00
Repair and maintenance	–	28.00
Consumable stores	–	22.00
Power	–	50.00
Machine hour rate of overheads	40.00	140.00
Wages	12.50	12.50
Comprehensive machine hour rate	52.50	152.50

(3 MARKS)

ANSWER-3

ANSWER-A

	Rs.
Sales 50,000 units at Rs. 7	3,50,000
Variable cost 50,000 × 3	1,50,000
Contribution 50,000 × 4	2,00,000
Fixed costs	1,20,000
Profit	80,000

P/ V ratio = $\frac{S-V}{S}$ × 100 = $\frac{7-3}{7}$ × 100 = $\frac{4}{7}$ × 100 = 57.14%

BEP (units) = $\frac{F}{contribution\ per\ unit}$ = $\frac{120000}{4}$ = 30000 $units$

BEP (Value) = 30,000 Units × 7 = Rs. 2,10,000

Profit Rs. 80,000 (as calculated above) **(2.5 MARKS)**

(ii) with a 10% increase in output & sales **(1 MARK)**

i.e., 50,000 + 5,000 = 55,000 units

Contribution 55,000 × Rs. 4 per unit	Rs. 2,20,000
Fixed costs	Rs. 1,20,000
Profit	Rs. 1,00,000

(iii) with a 10% increase in Fixed Cost **(1 MARK)**

Contribution (50,000 ×Rs. 4 per unit)	Rs. 2,00,000
Fixed cost (1,20,000+ 12,000)	Rs. 1,32,000
Profit	Rs. 68,000

(iv) with a 10% increase in variable costs **(2 MARKS)**

Selling price per unit	7.00
Less: variable cost (3+0.30)	3.30
Contribution per unit	3.70
Total contribution 50,000 × 3.70	1,85,000
Fixed costs	1,20,000
Profit	65,000

(v) with a 10% increase in selling price **(2 MARKS)**

Selling price per unit (7.00+0.70)	7.70
Variable cost per unit	3.00
Contribution per unit	4.70
Total contribution 50,000 × Rs. 4.70	2,35,000
Fixed costs	1,20,000
Profit	1,15,000

(vi) Effect of all the four above:- **(1.5 MARKS)**

Sales 55,000 × Rs. 7.70 per unit	Rs. 4,23,500
Variable cost 55,000 × 3.30	Rs. 1,81,500
Contribution 55,000 × 4.40	Rs. 2,42,000
Fixed cost 1,20,000 + 12,000	Rs. 1,32,000
Profit	Rs. 1,10,000

Note: It is assumed that the increased output of 55,000 units has been sold.

ANSWER-B

Production budget of Product Minimax and Heavyhigh (in units)

	April		May		June		Total	
	MM	**HH**	**MM**	**HH**	**MM**	**HH**	**MM**	**HH**
Sales	8,000	6,000	10,000	8,000	12,000	9,000	30,000	23,000
Add: Closing Stock (25% of next month's sale	2,500	2,000	3,000	2,250	4,000	3,500	9,500	7,750
Less: Opening Stock	2,000*	1,500*	2,500	2,000	3,000	2,250	7,500	5,750
Production units	8,500	6,500	10,500	8,250	13,000	10,250	32,000	25,000

*Opening stock of April is the closing stock of March, which is as per company's policy 25% of next months sale. **(5 MARKS)**

Production Cost Budget

Element of cost	**Rate (Rs.)**		**Amount (Rs.)**	
	MM (32,000 units)	**HH (25,000 units)**	**MM**	**HH**
Direct Material	220	280	70,40,000	70,00,000
Direct Labour	130	120	41,60,000	30,00,000
Manufacturing Overhead				
(4,00,000/ 1,80,000 × 32,000)			71,111	
(5,00,000/ 1,20,000 × 25,000)				1,04,167
			1,12,71,111	1,01,04,167

(5 MARKS)

ANSWER-4

ANSWER-A

Working Notes

Standard Costs

	Rs.
Direct materials (6,000 × Rs. 12)	72,000
Direct labour (6,000 × Rs. 4.40)	26,400
Variable overheads (6,000 × Rs. 3)	18,000
Total	1,16,400

Actual Cost

Direct Materials (12,670 × 5.70)	72,219
Direct wages	27,950
Variable overhead incurred	20,475
Total	1,20,644

Total Variance = SC- AC = 1,16,400 –1,20,644 = Rs. 4,244 (A)

(4 MARKS)

Missing Figures

1. Actual Direct Labour Hours (DLH)

   We can find out this through Variable overhead efficiency variance of Rs. 1,500 adverse

   VOH Efficiency Variance= SR (SH – AH)

1,500 A	=	3(6,000 – AH)
-1,500	=	18,000 – 3 AH
3AH	=	18,000 + 1,500 = 19,500
AH = 19,500/3	=	6,500 Actual Hours i.e. Actual DLH.

Actual Labour Rate per hour = $\frac{Rs.27950}{6500\ DLH} = Rs.4.30$

Relevant Variances:

1	Material Variances:	
	(a) MCV = SC – AC = 72,000 – 72,219 =	Rs. 219 (A)
	(b) MPV = AQ (SR – AR) = 12,670 (6 – 5.70) =	Rs. 3,801 (F)
	or = 19,000 (6 – 5.70) =	Rs. 5,700(F)
	(c) MUV = SR (SQ – AQ) = 6 (6,000 × 2 – 12,670)	
	= 6 (12,000 – 12,670) =	Rs. 4,020 (A)
2.	Labour Variances:	
	(a) LCV = SC – AC = 26,400 – 27,950 =	Rs. 1,550 (A)
	(b) LRV = AHP (SR – AR) = 6,500 (4.40 – 4.30) =	Rs. 650 (F)
	(c) LEV = SR (SH – AHP) = 4.40 (6,000 – 6,500) =	Rs. 2,200 (A)
3.	Variable Overhead Variances : (Output Basis)	
	(a) VOH Variance = SVO – AVO= 18,000 – 20,475	Rs. 2,475 (A)
	(b) Efficiency Variance = SR (SQ – AQ) (Note 1)	
	= 3 (6,500 – 6,000) =	Rs. 1,500 (A)
	(c) Expenditure Variance = (SVOSP – AVO) (Note 2)	
	= (19,500 – 20,475) =	Rs. 975 (A)

Note :

1. One unit of production in one hour. For 6,500 DLH, 6,500 units should have been produced (SQ). But AQ = 6,000 units. i.e. less than SQ. Hence, it is adverse variance of Rs. 1,500.
2. Standard Variable Overhead on Standard Production = 6,500 × 3 = Rs. 19,500

(6 MARKS)

ANSWER-B

Statement of Equivalent Production Process III

Input Details	Units	Output Particulars	Units	Equivalent Production					
				Material-A		Material-B		Labour & Overhead	
				%	Units	%	Units	%	Units
Opening WIP	1,600	Work on Op.	1,600	-	-	20	320	40	640

		WIP							
Process-II Transfer	55,400	Introduced & completed during the month	50,600	100	50,600	100	50,600	100	50,600
		Normal loss (5% of 52,800 units)	2,640	-	-	-	-	-	-
		Closing WIP	4,200	100	4,200	70	2,940	50	2,100
		Abnormal Gain	(2,040)	100	(2,040)	100	(2,040)	100	(2,040)
	57,000		57,000		52,760		51,820		51,300

Working note:

Production units = Opening units + Units transferred from Process-II – Closing Units

= 1,600 units + 55,400 units – 4,200 units

= 52,800 units

(2 MARKS)

Statement of Cost

	Cost (Rs.)	**Equivalent units**	**Cost per equivalent units (Rs.)**
Material A (Transferred from previous process)	6,23,250		
Less: Scrap value of normal loss (2,640 units × Rs. 5)	(13,200)		
	6,10,050	52,760	11.5627
Material B	2,12,400	51,820	4.0988
Labour	96,420	51,300	1.8795
Overheads	56,400	51,300	1.0994
	9,75,270		18.6404

(2 MARKS)

Statement of apportionment of Process Cost

		Amount (Rs.)	Amount (Rs.)
Opening WIP	Material A		24,000
Completed opening WIP units- 1600	Material B (320 units × Rs. 4.0988)	1311.62	
	Wages (640 units × Rs. 1.8795)	1202.88	
	Overheads (640 units × Rs. 1.0994)	703.62	3,218.12
Introduced & Completed- units 50,600	50,600 units × Rs. 18.6404		9,43,204.24
Total cost of 52,200 finished goods units			9,70,422.36
Closing WIP units- 4,200	Material A(4,200 units × Rs. 11.56 27)		48,563.34
	Material B (2,940 units × Rs. 4.0988)		12,050.47
	Wages (2,100 units × Rs. 1.8795)		3,946.95
	Overh (2,100 units × eads Rs. 1.099 4)		2,308.74
Abnormal gain units - 2,040	(2,040 units × Rs. 18.6404)		66,869.50 38026.42

(3.5 MARKS)

Process III A/c

Particulars		Units	Amount (Rs.)	Particulars		Units	Amount (Rs.)
To	Balance b/d	1,600	24,000	By	Normal loss	2,640	13,200
To	Process II A/c	55,400	6,23,250	By	Finished goods	52,200	9,70,422.36
To	Direct material		2,12,400	By	Closing WIP	4,200	66,874.06*
To	Direct wages		96,420				
To	Production overheads		56,400				
To	Abnormal gain	2,040	38,026.42				
		59,040	10,50,496.42			59,040	10,50,496.42

* Difference in figure due to rounding off has been adjusted with closing WIP

(2.5 MARKS)

ANSWER-5

ANSWER-A

Statement of Operating income and Operating income as a percentage of revenues for each product line

(When support costs are allocated to product lines on the basis of cost of goods sold of each product)

	Soft Drinks (Rs.)	Fresh Produce (Rs.)	Packaged Foods (Rs.)	Total (Rs.)
Revenues: (A)	39,67,500	1,05,03,000	60,49,500	2,05,20,000
Cost of Goods sold (COGS): (B)	30,00,000	75,00,000	45,00,000	1,50,00,000
Support cost (30% of COGS): (C) (Refer working notes)	9,00,000	22,50,000	13,50,000	45,00,000
Total cost: (D) = {(B) + (C)}	39,00,000	97,50,000	58,50,000	1,95,00,000

Operating income: E= {(A)-(D)}	67,500	7,53,000	1,99,500	10,20,000
Operating income as a percentage of revenues: (E/A) × 100)	1.70%	7.17%	3.30%	4.97%

Working notes:

1. **Total support cost:**

	(Rs.)
Bottles returns	60,000
Ordering	7,80,000
Delivery	12,60,000
Shelf stocking	8,64,000
Customer support	15,36,000
Total support cost	45,00,000

2. **Percentage of support cost to cost of goods sold (COGS):**

$$= \frac{Total\ support\ cost}{Total\ COGS} \times 100$$

$$= \frac{4500000}{15000000} \times 100 = 30\%$$

3. **Cost for each activity cost driver:**

Activity **(1)**	**Total cost (Rs.)** **(2)**	**Cost allocation base** **(3)**	**Cost driver rate** **(4) = [(2) ÷ (3)]**
Ordering	7,80,000	1,560 purchase orders	Rs.500 per purchase order
Delivery	12,60,000	3,150 deliveries	Rs.400 per delivery
Shelf-stocking	8,64,000	8,640 hours	Rs.100 per stocking hour
Customer support	15,36,000	15,36,000 items sold	Rs.1 per item sold

(7 MARKS)

Statement of Operating income and Operating income as a percentage of revenues for each product line

(When support costs are allocated to product lines using an activity -based costing system)

	Soft drinks (Rs.)	Fresh Produce (Rs.)	Packaged Food (Rs.)	Total (Rs.)
Revenues: (A)	39,67,500	1,05,03,000	60,49,500	2,05,20,000
Cost & Goods sold	30,00,000	75,00,000	45,00,000	1,50,00,000
Bottle return costs	60,000	0	0	60,000
Ordering cost* (360:840:360)	1,80,000	4,20,000	1,80,000	7,80,000
Delivery cost* (300:2190:660)	1,20,000	8,76,000	2,64,000	12,60,000
Shelf stocking cost* (540:5400:2700)	54,000	5,40,000	2,70,000	8,64,000
Customer Support cost* (1,26,000:11,04,000:3,06,000)	1,26,000	11,04,000	3,06,000	15,36,000
Total cost: (B)	35,40,000	1,04,40,000	55,20,000	1,95,00,000
Operating income C: {(A)- (B)}	4,27,500	63,000	5,29,500	10,20,000
Operating income as a % of revenues	10.78%	0.60%	8.75%	4.97%

* Refer to working note 3 **(3 MARKS)**

ANSWER-B

(i) Calculation of total cost for 'Professionals Protect Plus' policy

	Particulars	Amount (Rs.)	Amount (Rs.)
1.	**Marketing and Sales support:**		
	- Policy development cost	11,25,000	
	- Cost of marketing	45,20,000	
	- Sales support expenses	11,45,000	67,90,000
2.	**Operations:**		
	- Policy issuance cost	10,05,900	
	- Policy servicing cost	35,20,700	
	- Claims management cost	1,25,600	46,52,200
3.	**IT Cost**		74,32,000
4.	**Support functions**		
	- Postage and logistics	10,25,000	
	- Facilities cost	15,24,000	
	- Employees cost	5,60,000	47,29,400
	- Office administration cost	16,20,400	
	Total Cost		2,36,03,600

(ii) Calculation of cost per policy = $\frac{Total\ cost}{No.of\ policies} = \frac{Rs.23603600}{528} = Rs.44703.79$

(iii) Cost per rupee of insured value = $\frac{Total\ cost}{Total\ insured\ value} = \frac{Rs.2.36\ crore}{Rs.1320\ crore} = Rs.0.0018$

(10 MARKS)

ANSWER-6

ANSWER-A (5 MARKS)

Before setting up a system of cost accounting the under mentioned factors should be studied:

(i) **Objective:** The objective of costing system, for example whether it is being introduced for fixing prices or for insisting a system of cost control.

(ii) **Nature of Business or Industry:** The Industry in which business is operating. Every business industry has its own peculiarity and objectives. According to its cost information requirement cost accounting methods are followed. For example, an oil refinery maintains process wise cost accounts to find out cost incurred on a particular process say in crude refinement process etc.

(iii) **Organisational Hierarchy:** Costing system should fulfil the information requirements of different levels of management. Top management is concerned with the corporate strategy, strategic level management is concerned with marketing strategy, product diversification, product pricing etc. Operational level management needs the information on standard quantity to be consumed, report on idle time etc.

(iv) **Knowing the product:** Nature of product determines the type of costing system to be implemented. The product which has by-products requires costing system which account for by-products as well. In case of perishable or short self- life, marginal costing method is required to know the contribution and minimum price at which it can be sold.

(v) **Knowing the production process:** A good costing system can never be established without the complete knowledge of the production process. Cost apportionment can be done on the most appropriate and scientific basis if a cost accountant can identify degree of effort or resources consumed in a particular process. This also includes some basic technical know- how and process peculiarity.

(vi) **Information synchronisation:** Establishment of a department or a system requires substantial amount of organisational resources. While drafting a costing system, information needs of various other departments should be taken into account. For example, in a typical business organisation accounts department needs to submit monthly stock statement to its lender bank, quantity wise stock details at the time of filing returns to tax authorities etc.

(vii) **Method of maintenance of cost records:** The manner in which Cost and Financial accounts could be inter-locked into a single integral accounting system and how the results of separate sets of accounts i.e. cost and financial, could be reconciled by means of control accounts.

(viii) **Statutory compliances and audit**: Records are to be maintained to comply with statutory requirements and applicable cost accounting standards to be followed.

(ix) **Information Attributes:** Information generated from the Costing system should possess all the attributes of information i.e. complete, accurate, timeliness, relevant etc. to have an effective management information system (MIS).

ANSWER-B (5 MARKS)

Difference between Fixed and Flexible Budgets:

Sl. No.	Fixed Budget	Flexible Budget
1.	It does not change with actual volume of activity achieved. Thus it is known as rigid or inflexible budget	It can be re-casted on the basis of activity level to be achieved. Thus it is not rigid.
2.	It operates on one level of activity and under one set of conditions. It assumes that there will be no change in the prevailing conditions, which is unrealistic.	It consists of various budgets for different levels of activity
3.	Here as all costs like - fixed, variable and semi-variable are related to only one level of activity so variance analysis does not give useful information.	Here analysis of variance provides useful information as each cost is analysed according to its behaviour.
4.	If the budgeted and actual activity levels differ significantly, then the aspects like cost ascertainment and price fixation do not give a correct picture.	Flexible budgeting at different levels of activity facilitates the ascertainment of cost, fixation of selling price and tendering of quotations.
5.	Comparison of actual performance with budgeted targets will be meaningless specially when there is a difference between the two activity levels.	It provides a meaningful basis of comparison of the actual performance with the budgeted targets.

ANSWER-C (5 MARKS)

Net Realisable Value method: The realisation on the disposal of the by-product may be deducted from the total cost of production so as to arrive at the cost of the main product. For example, the amount realised by the sale of molasses in a sugar factory goes to reduce the cost of sugar produced in the factory.

When the by-product requires some additional processing and expenses are incurred in making it saleable to the best advantage of the concern, the expenses so incurred should be deducted from the total value realised from the sale of the by-product and only the net realisations should be deducted from the total cost of production to arrive at the cost of production of the main product. Separate accounts should be maintained for collecting additional expenses incurred on:

(i) further processing of the by-product, and

(ii) selling, distribution and administration expenses attributable to the by-product.

ANSWER-D **(5 MARKS)**

Zero based budgeting is superior to traditional budgeting: Zero based budgeting is superior to traditional budgeting in the following manner:

- It provides a systematic approach for evaluation of different activities.
- It ensures that the function undertaken are critical for the achievement of the objectives.
- It provides an opportunity for management to allocate resources to various activi ties after a thorough – cost benefit analysis.
- It helps in the identification of wasteful expenditure and then their elimination. If facilitates the close linkage of departmental budgets with corporate objectives.
- It helps in the introduction of a system of Management by Objectives