MOCK TEST PAPER – 1

INTERMEDIATE (NEW): GROUP – I

PAPER – 3: COST AND MANAGEMENT ACCOUNTING

SUGGESTED ANSWERS/HINTS

1. (a) (i) Selling Price per unit $= \frac{\text{Margin of Safety in Rupee value}}{\text{Margin of Safety in Quantity}}$

$$= \frac{\text{Rs.}7,50,000}{15,000\text{ units}} = \text{Rs.}50$$

(ii) Profit = Sales Value – Total Cost

= Selling price per unit × (BEP units + MoS units) – Total Cost

= Rs.50 × (5,000 + 15,000) units – Rs.7,75,000

= Rs.10,00,000 – Rs.7,75,000 = Rs.2,25,000

(iii) Profit/ Volume (P/V) Ratio $= \frac{\text{Profit}}{\text{Margin of Safety in Rupee value}} \times 100$

$$= \frac{\text{Rs.}2,25,000}{\text{Rs.}7,50,000} \times 100 = 30\%$$

(iv) Break Even Sales (in Rupees) = BEP units × Selling Price per unit

= 5,000 units × Rs.50 = Rs.2,50,000

(v) Fixed Cost = Contribution – Profit

= Sales Value × P/V Ratio – Profit

= (Rs.10,00,000 × 30%) – Rs.2,25,000

= Rs.3,00,000 – Rs.2,25,000 = Rs.75,000

(b) Workings:

(1) Budgeted Hours $= \frac{\text{Rs.}3,00,000}{\text{Rs.}10\text{ per hour}} = 30,000$ hours

(2) Standard Fixed Overhead rate per hour (Standard Rate):

$$= \frac{\text{Budgeted fixed overheads}}{\text{Budgeted Hours}} = \frac{\text{Rs.}3,00,000}{30,000\text{ hours}} = \text{Rs.}10.00$$

(3) Standard hour per unit of output $= \frac{30,000\text{ hours}}{20,000\text{ units}} = 1.5$ hours

(4) Standard hours for Actual Output = 22,000 units × 1.5 hours = 33,000 Hours

(5) Budgeted Overhead per day for budgeted days $= \frac{\text{Rs.}3,00,000}{25\text{ days}} = \text{Rs.}12,000$

(6) Budgeted Overhead for actual days worked = Rs.12,000 × 27 days = Rs.3,24,000

(7) Budgeted Hours for Actual days worked $= \frac{30,000\text{ hours}}{25\text{ days}} \times 27\text{ days} = 32,400$ hours

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Computation of Variances in relation to Fixed Overheads:

(i) **Efficiency Variance**

= Standard Rate × (Standard hours for actual output – Actual hours worked)

= Rs.10 (33,000 hours – 31,500 hours) = Rs.15,000 (Favourable)

(ii) **Capacity Variance**

= Standard Rate × (Actual Hours – Budgeted Hours for actual days worked)

= Rs.10 (31,500 hours – 32,400 hours) = Rs.9,000 (Adverse)

(iii) **Calendar Variance**

= Standard/Budgeted Fixed Overhead Rate per day × (Actual Working days – Budgeted working days)

= Rs.12,000 (27 days – 25 days) = Rs.24,000 (Favourable)

(iv) **Volume Variance**

= Standard Rate × (Standard hours – Budgeted hours)

= Rs.10 (33,000 hours – 30,000 hours) = Rs.30,000 (Favourable)

(v) **Expenditure Variance**

= Budgeted Overheads – Actual Overheads

= Rs.3,00,000 – Rs.3,10,000 = Rs.10,000 (Adverse)

Note: *Overhead Variances may also be calculated based on output.*

(c) (i) Computation of wages of each worker under guaranteed hourly rate basis

Worker	Actual hours worked (Hours)	Hourly wage rate (Rs.)	Wages (Rs.)
I	380	40	15,200
II	100	50	5,000
III	540	60	32,400

(ii) Computation of Wages of each worker under piece work earning basis

Product	Piece rate per unit (Rs.)	Worker-I		Worker-II		Worker-III	
		Units	Wages (Rs.)	Units	Wages (Rs.)	Units	Wages (Rs.)
A	15	210	3,150	-	-	600	9,000
B	20	360	7,200	-	-	1,350	27,000
C	30	460	13,800	250	7,500	-	-
Total			24,150		7,500		36,000

Since each worker's earnings are more than 50% of basic pay. Therefore, worker-I, II and III will be paid the wages as computed i.e. Rs. 24,150, Rs. 7,500 and Rs. 36,000 respectively.

Working Note:

1. Piece rate per unit

Product	Standard time per unit in minute	Piece rate each minute (Rs.)	Piece rate per unit (Rs.)
A	15	1	15

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B	20	1	20
C	30	1	30

(iii) Computation of wages of each worker under Premium bonus basis (where each worker receives bonus based on Rowan Scheme)

Worker	Time Allowed (Hr.)	Time Taken (Hr.)	Time saved (Hr.)	Wage Rate per hour (Rs.)	Earnings (Rs.)	Bonus (Rs.)*	Total Earning (Rs.)
I	402.5	380	22.5	40	15,200	850	16,050
II	125	100	25	50	5,000	1,000	6,000
III	600	540	60	60	32,400	3,240	35,640

Working Note:

1. Time allowed to each worker

Worker	Product-A	Product-B	Product-C	Total Time (Hours)
I	210 units × 15 = 3,150	360 units × 20 = 7,200	460 units × 30 = 13,800	24,150/60 = 402.50
II	-	-	250 units × 30 = 7,500	7,500/60 = 125
III	600 units × 15 = 9,000	1, 350 units × 20 = 27,000	-	36,000/60 = 600

* $\frac{\text{Time Taken}}{\text{Time Allowed}} \times \text{Time Saved} \times \text{Wage Rate}$

Worker-I = $\frac{380}{402.5} \times 22.5 \times 40 = 850$

Worker-II = $\frac{100}{125} \times 25 \times 50 = 1,000$

Worker-III = $\frac{540}{600} \times 60 \times 60 = 3,240$

(d) (i) Variable overhead absorption rate $= \frac{\text{Difference in Total Overheads}}{\text{Difference in levels in terms of machine hours}}$

$= \frac{\text{Rs.}3,47,625 - \text{Rs.}3,38,875}{15,500 \text{ hours} - 14,500 \text{ hours}}$ = Rs.8.75 per machine hour.

(ii) Calculation of Total fixed overheads:

	(Rs.)
Total overheads at 14,500 hours	3,38,875
Less: Variable overheads (Rs. 8.75 × 14,500)	(1,26,875)
Total fixed overheads	2,12,000

(iii) Calculation of Budgeted level of activity in machine hours:

Let budgeted level of activity = X

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Then, $\frac{(\text{Rs.}\,8.75\,X + \text{Rs.}\,2,12,000)}{X} = \text{Rs.}22$

8.75X + Rs.2,12,000 = 22X

13.25X = 2,12,000

X =16,000

Thus, budgeted level of activity = 16,000 machine hours.

(iv) Calculation of Under / Over absorption of overheads:

	(Rs.)
Actual overheads	3,22,000
Absorbed overheads (14,970 hours × Rs. 22 per hour)	3,29,340
Over-absorption (3,29,340 – 3,22,000)	7,340

(v) Departmental absorption rates provide costs which are more precise than those provided by the use of blanket absorption rates. Departmental absorption rates facilitate variance analysis and cost control. The application of these rates makes the task of stock and work-in-process (WIP) valuation easier and more precise. However, the setting up and monitoring of these rates can be time consuming and expensive.

2. (a) The total production overheads are Rs.52,00,000:

Product A: 20,000 × Rs.30 = Rs.6,00,000

Product B: 40,000 × Rs.40 = Rs.16,00,000

Product C: 60,000 × Rs.50 = Rs.30,00,000

On the basis of ABC analysis this amount will be apportioned as follows:

Statement Showing "Activity Based Production Cost"

Activity Cost Pool	Cost Driver	Ratio	Total Amount (Rs.)	A (Rs.)	B (Rs.)	C (Rs.)
Stores Receiving	Purchase Requisition	6:9:10	5,92,000	1,42,080	2,13,120	2,36,800
Inspection	Production Runs	5:7:8	17,88,000	4,47,000	6,25,800	7,15,200
Dispatch	Orders Executed	6:9:10	4,20,000	1,00,800	1,51,200	1,68,000
Machine Setups	Setups	12:13:15	24,00,000	7,20,000	7,80,000	9,00,000
Total Activity Cost				14,09,880	17,70,120	20,20,000
Quantity Produces				20,000	40,000	60,000
Unit Cost (Overheads)				70.49	44.25	33.67
Add: Conversion Cost (Material + Labour)				130	120	130
Total				200.49	164.25	163.67

(b) Cost Sheet of M/s A&R Brothers for the month ended March 2020:

	Particulars	Amount (Rs.)	Amount (Rs.)
(i)	**Materials consumed:**		
	- Opening stock	6,06,000	

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	- Add: Purchases	28,57,000	
		34,63,000	
	- Less: Closing stock	(7,50,000)	**27,13,000**
	Direct wages		37,50,000
(ii)	**Prime cost**		**64,63,000**
	Factory expenses		21,25,000
			85,88,000
	Add: Opening W-I-P		12,56,000
	Less: Closing W-I-P		(14,22,000)
	Factory cost		84,22,000
	Less: Sale of scrap		(26,000)
(iii)	**Cost of Production**		**83,96,000**
	Add: Opening stock of finished goods		3,59,000
	Less: Closing stock of finished goods		(3,09,000)
(iv)	**Cost of Goods Sold**		**84,46,000**
	Office and administration expenses		10,34,000
	Selling and distribution expenses		7,50,000
(v)	**Cost of Sales**		**1,02,30,000**
(vi)	**Profit** (balancing figure)		**31,70,000**
	Sales		1,34,00,000

3. (a) (i) Calculation of Economic Order Quantity (E.O.Q)

Annual requirement (usage) of raw material in kg. (A) = $\frac{1,00,000\,\text{units}}{2.5\,\text{units per kg.}} = 40,000\,\text{kg.}$

Ordering Cost (Handling & freight cost) (O) = Rs.1,460 + Rs.940 = Rs.2,400

Carrying cost per unit per annum (C) i.e. inventory carrying cost + working capital cost

= (Rs.2.5 × 12 months) + Rs.18 = Rs.48 per kg.

E.O.Q. $= \sqrt{\frac{2AO}{C}} = \sqrt{\frac{2 \times 40,000\,\text{kg.} \times \text{Rs.}2,400}{\text{Rs.}48}} = 2,000$ kg.

(ii) Frequency of placing orders for procurement:

Annual consumption (A) = 40,000 kg.

Quantity per order (E.O.Q) = 2,000 kg.

No. of orders per annum $\left(\frac{A}{E.O.Q}\right) = \frac{40,000\,\text{kg.}}{2,000\,\text{kg.}} = 20$ orders

Frequency of placing orders (in days) = $\frac{360\,\text{days}}{20\,\text{orders}} = 18$ days

(iii) Percentage of discount in the price of raw materials to be negotiated:

Particulars	On Quarterly Basis	On E.O.Q Basis
1. Annual Usage (in Kg.)	40,000 kg.	40,000 kg.

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2. Size of the order	10,000 kg.	2,000 kg.
3. No. of orders (1 ÷ 2)	4	20
4. Cost of placing orders or Ordering cost (No. of orders × Cost per order)	Rs.9,600 (4 order × Rs2,400)	Rs.48,000 (20 orders × Rs2,400)
5. Inventory carrying cost (Average inventory × Carrying cost per unit)	Rs.2,40,000 (10,000 kg. × ½ × Rs.48)	Rs.48,000 (2,000 kg. × ½ × Rs.48)
6. Total Cost (4 + 5)	Rs.2,49,600	Rs.96,000

When order is placed on quarterly basis the ordering cost and carrying cost increased by Rs.1,53,600 (Rs.2,49,600 - Rs.96,000).

So, discount required = Rs.1,53,600

Total annual purchase = 40,000 kg. × Rs.180 = Rs.72,00,000

So, Percentage of discount to be negotiated = $\frac{\text{Rs.1,53,600}}{\text{Rs.72,00,000}} \times 100 = 2.13\%$

(b) (i) Process- A Account

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Inputs	40,000	3,60,000	By Normal wastage (2,000 units × Rs.15)	2,000	30,000
To Material	---	2,42,000	By Abnormal loss A/c (1,000 units × Rs.27)	1,000	27,000
To Direct wages	---	2,58,000	By Process- B (29,600 units × Rs.27)	29,600	7,99,200
To Manufacturing Exp.	---	1,96,000	By Profit & Loss A/c (7,400 units × Rs.27)	7,400	1,99,800
	40,000	10,56,000		40,000	10,56,000

Cost per unit = $\frac{\text{Rs.10,56,000 - Rs.30,000}}{\text{40,000 units - 2,000 units}}$ = Rs. 27 per unit

Normal wastage = 40,000 units × 5% = 2,000 units

Abnormal loss = 40,000 units – (37,000 units + 2,000 units) = 1,000 units

Transfer to Process- B = 37,000 units × 80% = 29,600 units

Sale = 37,000 units × 20% = 7,400 units

Process- B Account

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Process- A A/c	29,600	7,99,200	By Normal wastage (2,960 units × Rs. 20)	2,960	59,200
To Material	---	2,25,000	By Profit & Loss A/c (27,000 units × Rs. 48)	27,000	12,96,000
To Direct Wages	---	1,90,000			
To Manufacturing Exp.	---	1,23,720			

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To Abnormal Gain A/c (360 units × Rs. 48)	360	17,280			
	29,960	13,55,200		29,960	13,55,200

$$\text{Cost per unit} = \frac{\text{Rs.}13,37,920 - \text{Rs.}59,200}{29,600\,\text{units} - 2,960\,\text{units}} = \text{Rs. } 48 \text{ per unit}$$

Normal wastage = 29,600 units × 10% = 2,960 units

Abnormal gain = (27,000 units + 2,960 units) – 29,600 units = 360 units

(ii) Costing Profit & Loss Account

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Process- A A/c	1,99,800	By Sales:	
To Process- B A/c	12,96,000	- Process-A (7,400 units × Rs. 37)	2,73,800
To Abnormal loss A/c	12,000	- Process- B (27,000 units × Rs. 61)	16,47,000
To Indirect Expenses	4,48,080	By Abnormal gain	10,080
		By Net loss	25,000
	19,55,880		19,55,880

Working Notes:

Normal wastage (Loss) Account

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Process- A A/c	2,000	30,000	By Abnormal Gain A/c (360 units × Rs. 20)	360	7,200
To Process- B A/c	2,960	59,200	By Bank (Sales)	4,600	82,000
	4,960	89,200		4,960	89,200

Abnormal Loss Account

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Process- A A/c	1,000	27,000	By Bank A/c (1,000 units × Rs. 15)	1,000	15,000
			By Profit & Loss A/c	---	12,000
	1,000	27,000		1,000	27,000

Abnormal Gain Account

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Normal loss A/c (360 units × Rs. 20)	360	7,200	By Process- B A/c	360	17,280
To Profit & Loss A/c		10,080			
	360	17,280		360	17,280

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4. (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/ Cost of Production	53,52,000
Less: Closing Stock $\left(\frac{Rs.53,52,000}{52,000\,units} \times 2,000\,units\right)$	(2,05,846)
Cost of Goods Sold	51,46,154
Add: General administrative expenses (10% of Rs.53,52,000)	5,35,200
Add: Selling expenses (Rs.10 × 50,000 units)	5,00,000
Cost of Sales	61,81,354
Profit (Balancing figure)	18,646
Sales Value	62,00,000

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	2,05,846
To Factory expenses	8,92,000		
To General administrative expenses	5,35,200		
To Selling expenses	5,00,000		
To Profit (Balancing figure)	18,646		
	64,05,846		64,05,846

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

Particulars	Amount (Rs.)
Profit as per Cost Accounts	18,646
Additions:	
General 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	80,000
	4,03,646
Deductions:	
Factory expenses (Under -absorbed) (Rs.9,50,000 – 8,92,000)	58,000
Closing stock (Over-valued) (Rs.2,05,846 – Rs. 1,50,000)	55,846
Preliminary expenses written off	70,000
	1,83,846
Profit as per Financial Accounts	2,19,800

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(b) (i) Calculation of Budgeted profit for the FY 2019-20

	30,000 units	
	Per unit (Rs.)	Amount (Rs.)
Sales **(A)**	400.00	1,20,00,000
Less: Variable Costs:		
- Direct Material	150.00	45,00,000
- Direct Wages	50.00	15,00,000
- Variable Overheads	50.00	15,00,000
- Direct Expenses	30.00	9,00,000
- Variable factory expenses (75% of Rs.40p.u.)	30.00	9,00,000
- Variable Selling & Dist. exp. (80% of Rs.20p.u.)	16.00	4,80,000
Total Variable Cost **(B)**	326.00	97,80,000
Contribution **(C) = (A – B)**	74.00	22,20,000
Less: Fixed Costs:		
- Office and Admin. exp. (100%)	--	3,00,000
- Fixed factory exp. (25%)	--	3,00,000
- Fixed Selling & Dist. exp. (20%)	--	1,20,000
Total Fixed Costs **(D)**	--	7,20,000
Profit **(C – D)**	--	15,00,000

(ii) Expense Budget of GP Ltd. for the FY 2020-21 at 50% & 60% level

	30,000 units		36,000 units	
	Per unit (Rs.)	Amount (Rs.)	Per unit (Rs.)	Amount (Rs.)
Sales **(A)**	400.00	1,20,00,000	400.00	1,44,00,000
Less: Variable Costs:				
- Direct Material	165.00	49,50,000	165.00	59,40,000
- Direct Wages	55.00	16,50,000	55.00	19,80,000
- Variable Overheads	55.00	16,50,000	55.00	19,80,000
- Direct Expenses	33.00	9,90,000	33.00	11,88,000
- Variable factory expenses	33.00	9,90,000	33.00	11,88,000
- Variable Selling & Dist. exp.	17.60	5,28,000	17.60	6,33,600
Total Variable Cost **(B)**	358.60	1,07,58,000	358.60	1,29,09,600
Contribution **(C) = (A – B)**	41.40	12,42,000	41.40	14,90,400
Less: Fixed Costs:				
- Office and Admin. exp. (100%)	--	3,45,000	--	3,45,000
- Fixed factory exp. (25%)	--	3,45,000	--	3,45,000
- Fixed Selling & Dist. exp. (20%)	--	1,38,000	--	1,38,000
Total Fixed Costs **(D)**	--	8,28,000	--	8,28,000
Profit **(C – D)**	--	4,14,000	--	6,62,400

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5. (a) Total cost statement of KR Resort (P) Limited

Particulars	Cost per annum (Rs. in lakhs)
Staff Salaries	780.00
Room Attendant's Wages (Refer working note 3)	286.20
Lighting, Heating & Power	350.00
Repairs, Maintenance & Renovation	220.00
Linen	60.00
Laundry charges	34.00
Interior Decoration	85.00
Sundries	36.28
Depreciation: (Refer working note 4)	
- Building	45.00
- Furniture & Fixture	9.00
- Air Conditioners	7.50
Total cost for the year	1912.98

Computation of profit:

Let Rs. x be the rent for deluxe from.

Equivalent deluxe room days are 90,720 (Refer working note 2)

Total takings = Rs. 90,720x

Profit is 25% of total takings.

Profit = 25% of Rs. 90,720x = Rs. 22,680x

Total takings = Total Cost + Profit

Rs. 90,720x = Rs. 19,12,98,000 + Rs. 22,680x

Rs. 90,720x -Rs. 22,680x = Rs. 19,12,98,000

Rs. 68,040x = Rs. 19,12,98,000

$$X = \frac{Rs.19,12,98,000}{Rs.68,040} = Rs.\ 2,811.55$$

Rent to be charged for deluxe room	Rs. 2,811.55
Rent to be charged for super deluxe room = Rent of deluxe room x 2 = Rs. 2,811.55 x 2	Rs. 5,623.10
Rent to be charged for luxury suite = Rent of Super Deluxe room x 1.5 = Rs. 5,623.10 x 1.5	Rs. 8,434.65

Working Notes:

(1) Computation of Room Occupancy

Type of Room	No. of rooms x no. of days x occupancy %	Room days
Deluxe Room	100 rooms x 360 days x 90% occupancy	32,400
Super Deluxe Room	60 rooms x 360 days x 75% occupancy	16,200

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Luxury Suite	40 rooms x 360 days x 60% occupancy	8,640
	Total	57,240

(2) Computation of equivalent deluxe room days

Rent of 'super deluxe' room is to be fixed at 2 times of 'deluxe room' and luxury suite' is 3 times of 'deluxe room'. Therefore, equivalent room days would be:

Type of Room	Room days	Equivalent deluxe room days
Deluxe Room	32,400 x 1	32,400
Super Deluxe Room	16,200 x 2	32,400
Luxury Suite	8,640 x 3	25,920
	Total	90,720

(3) Computation of room attendant's wages

Room occupancy days @ Rs. 500 per day = 286.2 lakhs (i.e. 57,240 days ×Rs. 500)

(4) Computation of Depreciation per annum

Particulars	Cost (Rs.)	Rate of Depreciation	Depreciation (Rs.)
Building	9,00,00,000	5%	45,00,000
Furniture & Fixtures	90,00,000	10%	9,00,000
Air Conditioners	75,00,000	10%	7,50,000

(b) (i) Journal Entries under Integrated system of accounting

Particulars		Rs.	Rs.
(i) Work-in-Progress Control A/c	Dr.	6,50,000	
Factory Overhead Control A/c	Dr.	2,30,000	
To Stores Ledger Control A/c			8,80,000
(Being issue of Direct and Indirect materials)			
(ii) Work-in Progress Ledger Control A/c	Dr.	6,75,000	
Factory Overhead control A/c	Dr.	2,25,000	
To Wages Control A/c			9,00,000
(Being allocation of Direct and Indirect wages)			
(iii) Factory Overhead Control A/c	Dr.	60,000	
To Costing Profit & Loss A/c			60,000
(Being transfer of over absorption of Factory overhead)			
Costing Profit & Loss A/c	Dr.	50,000	
To Administration Overhead Control A/c			50,000
(Being transfer of under absorption of Administration overhead)			
(iv) Trade Payables A/c	Dr.	9,00,000	
To Cash/ Bank A/c			9,00,000
(Being payment made to creditors)			

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(v)	Cash/ Bank A/c	Dr.	8,00,000	
	To Trade receivables A/c			8,00,000
	(Being payment received from debtors)			

(ii)

		X	Y	Z
I.	Contribution *per unit* (Rs.)	40	30	50
II.	Units (Lower of Production / Market Demand)	2,000	2,000	900
III.	Possible Contribution (Rs.) [I × II]	80,000	60,000	45,000
IV.	Opportunity Cost* (Rs.)	60,000	80,000	80,000

(*) Opportunity cost is the maximum possible contribution forgone by not producing alternative product i.e. if Product X is produced then opportunity cost will be maximum of (Rs. 60,000 from Y, Rs. 45,000 from Z).

6. (a) Accounting treatment of idle time wages & overtime wages in cost accounts: Normal idle time is treated as a part of the cost of production. Thus, in the case of direct workers, an allowance for normal idle time is built into the labour cost rates. In the case of indirect workers, normal idle time is spread over all the products or jobs through the process of absorption of factory overheads.

Under Cost Accounting, the overtime premium is treated as follows:

If overtime is resorted to at the desire of the customer, then the overtime premium may be charged to the job directly.

If overtime is required to cope with general production program or for meeting urgent orders, the overtime premium should be treated as overhead cost of particular department or cost center which works overtime.

Overtime worked on account of abnormal conditions should be charged to costing Profit & Loss Account.

If overtime is worked in a department due to the fault of another department, the overtime premium should be charged to the latter department.

(b) Zero-based budgeting (ZBB) involves the following stages:

(i) Identification and description of Decision packages

(ii) Evaluation of Decision packages

(iii) Ranking (Prioritisation) of the Decision packages

(iv) Allocation of resources

(i) Identification and description of Decision packages: Decision packages are the programmes or activities for which decision is required to be taken. The programmes or activities are described for technical specifications, financial impact in the form of cost benefit analysis and other issues like environmental, regulatory, social etc.

(ii) Evaluation of Decision packages: Once Decision packages are identified and described, it is evaluated against factors like synchronisation with organisational objectives, availability of funds, regulatory requirement etc.

(iii) Ranking (Prioritisation) of the Decision packages: After evaluation of the decision packages, it is ranked on the basis priority of the activities. Because of this prioritization feature ZBB is also known as ***Priority-based Budgeting***.

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(iv) Allocation of resources: After ranking of the decision packages, resources are allocated for decision packages. Budgets are prepared like it is done first time without taking reference to previous budgets.

(c) Differences between Job costing and Batch costing:

Sr. No	Job Costing	Batch Costing
1	Method of costing used for non- standard and non- repetitive products produced as per customer specifications and against specific orders.	Homogeneous products produced in a continuous production flow in lots.
2	Cost determined for each Job.	Cost determined in aggregate for the entire Batch and then arrived at on per unit basis.
3	Jobs are different from each other and independent of each other. Each Job is unique.	Products produced in a batch are homogeneous and lack of individuality.

(d) By-product cost can be dealt in cost accounting in the following ways:

(i) When they are of small total value: When the by-products are of small total value, the amount realised from their sale may be dealt in any one the following two ways:

1. The sales value of the by-products may be credited to the Costing Profit and Loss Account and no credit be given in the Cost Accounts. The credit to the Costing Profit and Loss Account here is treated either as miscellaneous income or as additional sales revenue.
2. The sale proceeds of the by-product may be treated as deductions from the total costs. The sale proceeds in fact should be deducted either from the production cost or from the cost of sales.

(ii) When the by-products are of considerable total value: Where by-products are of considerable total value, they may be regarded as joint products rather than as by-products. To determine exact cost of by-products the costs incurred upto the point of separation, should be apportioned over by-products and joint products by using a logical basis. In this case, the joint costs may be divided over joint products and by-products by using relative market values; physical output method (at the point of split off) or ultimate selling prices (if sold).

(iii) Where they require further processing: In this case, the net realisable value of the by-product at the split-off point may be arrived at by subtracting the further processing cost from the realisable value of by-products.

If total sales value of by-products at split-off point is small, it may be treated as per the provisions discussed above under (*i*).

In the contrary case, the amount realised from the sale of by-products will be considerable and thus it may be treated as discussed under (ii).

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