



J.K. SHAH[®]
TEST SERIES
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SUGGESTED SOLUTION

CA INTERMEDIATE

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- NOTES: (1) WORKING NOTES SHOULD FORM PART OF ANSWERS.
 (2) INTERNAL WORKING NOTES SHOULD ALSO BE CONSIDERED.
 (3) NEW QUESTION SHOULD BE ON NEW PAGE**

ANSWER -1

a

Difference between Minimum lead time Maximum lead time = 4 days

Max. lead time – Min. lead time = 4 days

Or, Max. lead time = Min. lead time + 4 days (i)

Average lead time is given as 6 days i.e.

$$\frac{\text{Max.leadtime} + \text{Min.leadtime}}{2} = 6 \text{ days} \dots \dots \dots \text{(ii)}$$

Putting the value of (i) in (ii),

$$\frac{\text{Min.leadtime} + 4 \text{ days} + \text{Min.leadtime}}{2} = 6 \text{ days}$$

Or, Min. lead time + 4 days + Min. lead time = 12 days

Or, 2 Min. lead time = 8 days

Or, Minimum lead time = 8 days/2 = 4 days

Putting this Minimum lead time value in (i), we get Maximum lead time

= 4 days + 4 days = 8 days

(2 MARKS)

(i) Maximum consumption per day:

Re-order level = Max. Re-order period × Maximum Consumption per day

1,60,000 units = 8 days × Maximum Consumption per day

$$\text{Or, Maximum Consumption per day} = \frac{1,60,000 \text{ units}}{8 \text{ days}} = 20,000 \text{ units}$$

(ii) Minimum Consumption per day:

Maximum Stock Level =

Re-order level + Re-order Quantity – (Min. lead time × Min. Consumption per day)

Or, 1,90,000 units = 1,60,000 units + 90,000 units – (4 days × Min. Consumption per day)

Or, 4 days × Min. Consumption per day = 2,50,000 units – 1,90,000 units

$$\text{Or, Minimum Consumption per day} = \frac{60,000 \text{ units}}{4 \text{ days}} = 15,000 \text{ units}$$

(1.5*2 = 3 MARKS)

b**Cost sheet for the year ended**

Particulars	Amount (₹)
Direct Materials	2,00,552
Add: Direct Wages	(+) 1,49,448
PRIME COST	3,50,000
Add: Factory overheads (60% of labour)	(+) 89,669
FACTORY COST (Works cost)	4,39,669
Add: Office overheads (Related to Production) (20% of works cost)	(+) 87,934
COST OF PRODUCTION	5,27,603
Add: Opening stock of finished goods	-
Less: Closing stock of finished goods [10% of COP]	(-) 52,760
TOTAL COST	4,74,843
Add: PROFIT	(+) 35,157
SALES	5,10,000

Note:- As there is no opening stock and 10% of output is in stock, the value of closing stock of Finished goods is 10 % of Cost of production.

(5 MARKS)**c****Computation of Comprehensive Machine hour Rate**

	Per Annum (Rs.)	Per hour (Rs.)
Fixed costs (Standing Charges)		
Depreciation $\left(\frac{\text{Rs.122000}}{2220 \text{ hours}} \right)$	1,22,000	54.95
Operators wages $\left(\frac{\text{Rs.594000}}{12 \text{ machines}} \times \frac{1}{2220 \text{ hours}} \right)$	49,500	22.30
Insurance premium	12,600	5.68
Annual maintenance cost	32,500	14.64
Apportioned cost of factory rent	19,200	8.65
	2,35,800	106.22
Variable costs:		
Electricity (12 units x 2,100 hours x Rs. 6.5)	1,63,800	73.78
Comprehensive Machine Hour rate	3,99,600	180.00

Working Notes:

1. Effective machine hour:

= Budgeted working hours – maintenance time

= (2,400 - 180) hours = **2,220 hours.**

2. Electricity consumption hours:

= Budgeted working hours – Maintenance time – Set-up time

= (2,400 – 180 – 120) hours = 2,100 hours.

3. Operators' wages per annum

Basic wages (3 operators × Rs. 600 × 300 days) = Rs. 5,40,000

Add: Production bonus (10% of Rs. 5,40,000) Rs. 54,000

Rs. 5,94,000

4. Depreciation per annum = $\frac{Rs.(12,70,000+40,000)-Rs.90,000}{10 \text{ years}}$ = Rs. 1,22,000

5. Apportioned cost for factory rent: $\frac{Rs.24,000 \times 12}{3000 \text{ sq.ft.}} \times 200 \text{ sq.ft.}$ = Rs. 19,200

Total area occupied = 200 + 2800 = 3,000 Sq. Ft.

(5 MARKS)

d Increase in Hourly Rate of Wages (Rowan Plan) is (Rs. 60 – Rs. 50) = Rs. 10

This is Equal to [TS / TA] X Hourly rate.

Hence, Rs. 10 = [TS / TA] X Hourly rate.

10 = [TS / 90] X 50

TS = 900 / 50 = 18 Hours.

Time Taken = (90 – 18) = 72 Hours

Alternatively

Let TT hours be the total time taken in hours by A; ₹ 50/- is the rate per hour; standard time or Time allowed (TA) is 90 hours and effective hourly earning rate is ₹ 60 & TS is the time saved = 90 - TT then

Earning (Under Rowan incentive plan) = Basic wages + Bonus Amt

= (Hours worked × Rate per hour) + $\left(\frac{TT}{TA}\right) \times TS \times \text{Rate per hour}$

However, earning is also = Effective Rate per hour X TT

Hence,

Effective rate per hour × TT = Basic wages + Bonus Amt

60 TT = (TT × 50) + $\left(\frac{TT}{90}\right) \times (90 - TT) \times 50$

60 TT = TT $\left[50 + \left(\frac{90 - TT}{90}\right) \times 50\right]$

Cancelling TT we get

60 = $50 + \left(\frac{90 - TT}{90}\right) \times 50$

60 - 50 = $\left(\frac{90 - TT}{90}\right) \times 50$

10 = $\left(\frac{90 - TT}{90}\right) \times 50$

10 × 90 = (90 - TT) × 50

18 = 90 - TT

TT = 72

(5 MARKS)

ANSWER -2

a

Cost Sheet of X Limited

Particulars	Produced	???	Units	Total Cost		C.P.U.
	Sold	???	Units	\	\	\
<u>Raw Materials Consumed</u>						
Opening Stock of Raw Materials				2,00,000		
[+] Purchases of Raw Materials				25,00,000		
[-] Closing Stock of Raw Materials				[9,45,000]	17,55,000	?
Direct Wages					22,22,500	?
Prime Cost					39,77,500	?
<u>Add: Factory Overheads [Indirect Manufacturing Overheads]</u>					14,81,667	?
Gross Factory Cost					54,59,167	?
[+] Op. St. of W.I.P.					4,00,000	?
[-] Cl. St. of W.I.P.					[6,78,917]	?
Factory/Works Cost					51,80,250	?
<u>Add: Administration Overheads [Related to Production]</u>					NIL	?
Cost of Production					51,80,250	?
[+] Opening Stock of Finished Goods					3,77,500	?
[-] Closing Stock of Finished Goods					[3,07,750]	?
Cost of Goods Sold					52,50,000	?
<u>Add: Marketing Overheads [Selling and Distribution Overheads]</u>					NIL	?
Cost of Sales					52,50,000	?
Profit [75,00,000 - 52,50,000]					22,50,000	?
Sales					75,00,000	?

Value of Closing Inventory

Raw Materials	9,45,000
Work-in-Progress	6,78,917
Finished Goods	3,07,750

W.N.1**Factory Overheads [Indirect Manufacturing Overheads]**

22,22,500	60	14,81,667
???	40	

Conversion cost includes wages and overheads. Factory overheads are 40% of conversion cost. Thus wages must be 60% of conversion cost.

W.N.2**Closing Stock of Finished Goods**

Step 1: Gross Factory Cost = 39,77,500 + 14,81,667 = 54,59,167

Step 2:**Cost of Production**

Total cost of goods available for sale =

Cost of Production of Goods produced in current year + Cost of Opening Stock of Finished Goods

$$55,57,750 = x + 3,77,500$$

$$x = 51,80,250$$

$$\text{Cost of Production} = x = 51,80,250$$

Since there is no Administration Overheads related to production, Cost of Production = Factory Cost.

Step 3:**Calculation of Cost of Sales**

Sales	75,00,000	100	52,50,000
	???	70	

$$\text{Cost of Sales} = 52,50,000$$

$$\text{Profit} = 75,00,000 - 52,50,000$$

$$= 22,50,000$$

Since there is no Selling and Distribution Overheads, Cost of Sales = Cost of Goods Sold.

Step 4:**Closing Stock of Finished Goods**

$$51,80,250 + 3,77,500 - x = 52,50,000$$

$$x = 3,07,750$$

$$\text{Closing Stock of Finished Goods} = x = 3,07,750$$

Step 5:**Closing Stock of Work-in-Progress**

$$54,59,167 + 4,00,000 - x = 51,80,250$$

$$x = 6,78,917$$

$$\text{Closing Stock of Work-in-Progress} = x = 6,78,917$$

Step 6:**Raw Materials Consumed**

$$39,77,500 - 22,22,500 = 17,55,000$$

Step 7:**Closing Stock of Raw Materials**

$$2,00,000 + 25,00,000 - x = 17,55,000$$

$$x = 9,45,000$$

$$\text{Closing Stock of Raw Materials} = x = 9,45,000$$

Marking System:

2 Marks for Cost of Production/Factory Cost

2 Marks for Cost of Sales/Cost of Goods Sold

1 Mark each for Closing Stock of R.M., W.I.P., F.G.

4 Marks for Cost Sheet preparation

1 Mark for indicating answer in writing for Closing Stock of R.M., W.I.P., F.G.

b**(i) Production Budget of 'X' for the Second Quarter**

Particulars	Bags (Nos.)
Budgeted Sales	50,000
Add: Desired Closing stock	11,000
Total Requirements	61,000
Less: Opening stock	15,000
Required Production	46,000

(2 MARKS)**(ii) Raw-Materials Purchase Budget in Quantity as well as in Rs. for 46,000 Bags of 'X'**

Particulars	'Y' Kgs .	'Z' Kgs .	Empty Bags Nos.
Production Requirements	2.5	7.5	1.0
Per bag of 'X'			
Requirement for Production	1,15,000 (46,000 × 2.5)	3,45,000 (46,000 × 7.5)	46,000 (46,000 × 1)
Add: Desired Closing Stock	26,000	47,000	28,000
Total Requirements	1,41,000	3,92,000	74,000
Less: Opening Stock	32,000	57,000	37,000
Quantity to be purchased	1,09,000	3,35,000	37,000
Cost per Kg./Bag	Rs.120	Rs.20	Rs.80
Cost of Purchase (Rs.)	1,30,80,000	67,00,000	29,60,000

(3 MARKS)**(iii) Computation of Budgeted Variable Cost of Production of 1 Bag of 'X'**

Particulars	(Rs.)
Raw – Material	
Y 2.5 Kg @120	300.00
Z 7.5 Kg. @20	150.00
Empty Bag	80.00
Direct Labour(Rs.50× 9 minutes / 60 minutes)	7.50
Variable Manufacturing Overheads	45.00
Variable Cost of Production <i>per bag</i>	582.50

(2 MARKS)

(iv) Budgeted Net Income for the Second Quarter

Particulars	Per Bag (Rs.)	Total (Rs.)
Sales Value (50,000 Bags)	900.00	4,50,00,000
Less: Variable Cost:		
Production Cost	582.50	2,91,25,000
Admn. & Selling Expenses (5% of Sales Price)	45.00	22,50,000
Budgeted Contribution	272.50	1,36,25,000
Less: Fixed Expenses:		
Manufacturing		30,00,000
Admn. & Selling		20,50,000
Budgeted Net Income		85,75,000

(3 MARKS)**ANSWER -3****a**

Dr.		Process I A/c		Cr.	
Particulars	Quantity	Amount	Particulars	Quantity	Amount
To Materials input [16,000 X 1.20]	16,000	19,200	By Normal Loss [16,000 X 8%]	1,280	640
To Indirect Materials		336	[1,280 X 0.50]		
To Labour		720	By Abnormal Loss	720*	1,152
To Overheads [720 X 240%]		1,728	By Output transferred to next process	14,000	22,400*
To Royalty [14,720 X 0.15]		2,208			
	16,000	24,192		16,000	24,192

Dr.		Abnormal Loss A/c		Cr.	
Particulars	Quantity	Amount	Particulars	Quantity	Amount
To Process I A/c	720	1,152	By Cash Bank A/c [720 X 0.50]	720	360
			By Royalty Payable A/c		108
			By Costing P & L A/c		684*
	720	1,152		720	1,152

Dr.		Royalty Payable A/c		Cr.	
Particulars	Quantity	Amount	Particulars	Quantity	Amount
To Abnormal Loss A/c [720 x 0.15]	720	108	By Process I A/c	14,720	2,208
To Balance c/f [14,000 x 0.15]	14,000	2,100			
	14,720	2,208		14,720	2,208

Working Note 1: Valuation of Abnormal Loss

$$\text{Cost Per Unit} = \frac{\text{Total of Debit - Normal Loss in in Rupees}}{\text{Total Input Units - Normal Loss in Units}}$$

$$\begin{aligned} \text{Cost Per Unit} &= \frac{24,192 - 640}{16,000 - 1,280} \\ &= \frac{23,552}{14,720} \\ &= \text{` 1.60 per kg} \end{aligned}$$

$$720 \text{ kgs} \times 1.60 \text{ per kg} = \text{` 1,152}$$

Marking System:

5 marks for Process A/C

2 marks each for Abnormal Loss A/C and

Royalty Payable A/C

1 Mark for WN of Abnormal Loss

b Working notes:

1. $\text{Machine hour rate} = \frac{\text{Total annual overheads}}{\text{Total machine hours}}$
 $= \frac{\text{Rs. 19,88,000}}{1,40,000 \text{ hours}} = \text{Rs. 14.20 per hour}$
2. $\text{Machine hour rate} = \frac{\text{Total annual overhead cost}}{\text{for volume related activities}} \div \text{Total machine hours}$
 $= \frac{\text{Rs. 5,50,000}}{1,40,000 \text{ hours}} = \text{Rs. 3.93 (approx.)}$
3. $\text{Cost of one set-up} = \frac{\text{Total costs related to set-ups}}{\text{Total number of set-ups}}$
 $= \frac{\text{Rs. 8,20,000}}{64 \text{ set-ups}} = \text{Rs. 12,812.50}$
4. $\text{Cost of a purchase order} = \frac{\text{Total costs related to purchases}}{\text{Total number of purchase order}}$
 $= \frac{\text{Rs. 6,18,000}}{544 \text{ orders}} = \text{Rs. 1,136.03}$

[4 Marks]

(i)

**Statement showing overhead cost per unit
(based on traditional method of charging overheads)**

Products	Annual output (units)	Total machine hours	Overhead cost component (Refer to W, Note 1) Rs.	Overhead cost per unit Rs.
A	5,000	20,000	2,84,000 (20,000 hrs. × Rs. 14.20)	56.80 (Rs. 2,84,000 / 5,000 units)
B	60,000	1,20,000	17,04,000 (1,20,000 hrs. × Rs. 14.20)	28.40 (Rs. 17,04,000 / 60,000 units)

[2 Marks]

(ii)

**Statement showing overhead cost per unit
(based on activity based costing method)**

Products	Annual output units	Total Machine Hours	Cost related to volume activities Rs.	Cost related to purchases Rs.	Cost related to set-ups Rs.	Total cost Rs.	Cost per unit Rs.
	(a)	(b)	(c)	(d)	(e)	(f) = [(c) + (d) + (e)]	(g) = (f)/(a)
A	5,000	20,000	78,600 (20,000 hrs × Rs. 3.93)	1,81,764.80 (160 orders × Rs. 1136.03)	2,56,250 (20 set ups × Rs. 12,812.50)	5,16,614.80	103.32
B	60,000	1,20,000	4,71,600 (1,20,000 hrs × Rs. 3.93)	4,36,235.52 (384 orders × Rs. 1136.03)	5,63,750 (44 set ups × Rs. 12,812.50)	14,71,585.52	24.53

Note: Refer to working notes 2,3 and 4 for computing costs related to volume activities, set-ups and purchases respectively.

[4 Marks]

ANSWER -4

a

(a) Statement of Total cost:

	(Rs.)
Staff salary	4,00,000
Room attendants' salary (Rs. 10 × 46,800 room-days)	4,68,000
Lighting expenses (Rs. 250 × 1,560 room-months)	3,90,000
Power expenses (Rs. 100 × 480 room-months)	48,000
Repairs to building	50,000
Linen	24,000
Sundries Expenses	70,770
Interior decoration and furnishing	50,000
Depreciation on Building (Rs. 20 Lakhs × 5%)	1,00,000
Depreciation on other Equipment (Rs. 5 Lakhs × 10%)	50,000
Total cost excluding interest	16,50,770
Add: Profit Margin (20% on cost excluding interest)	3,30,154
Add: Interest on investments (Rs. 25 Lakhs × 5%)	1,25,000
Total Rent to be charged	21,05,924

[7 Marks]

Calculation of Room Rent per day:

Total Cost / Equivalent Room days = Rs. 21,05,924 ÷ 46,800 = **Rs.44.99 or Rs. 45**

[1 Mark]

Note: It is assumed that staff salary of Rs. 4,00,000 is per annum.

Working Notes:**Total Room days in a year**

Season	Occupancy (Room-days)	Equivalent occupied room-month
Summer – 90% Occupancy	200 Rooms × 90% × 6 months × 30 days in a month = 32,400 Room Days	32,400 ÷ 30 days = 1,080 room-month
Winter – 40% Occupancy	200 Rooms × 40% × 6 months × 30 days in a month = 14,400 Room Days	14,400 ÷ 30 days = 480 room-month
Total Room Days	32,400 + 14,400 = 46,800 Room Days	1,560 room-month

(3 MARKS)

b

Dr.		Contract A/c		Cr.	
Particulars	Amt.	Particulars	Amt.		
To <u>Work In Progress [Opening]</u>		By <u>Work In Progress</u>			
Work Certified	94,00,000	Work Certified	3,00,00,000		
Work Uncertified	1,12,000	Work Uncertified	3,20,000		3,03,20,000
To Material at site (Opening Stock)		By <u>Materials returned to</u>			
	80,000	Stores			2,50,000
To Materials purchased	40,00,000	Suppliers			1,50,000
To Materials issued from stores	15,00,000	By Material at site (Cl. Stock)			2,00,000
To Wages	59,80,000	By Material sold			10,000
To Supervisor's fees	5,10,000				
To Plant hire charges	5,00,000				
To Other Expenses	1,00,000				
To share of general overheads for this contract [18,00,000 X 1/10]	1,80,000				
To Sub-contracting charges	1,20,000				
To Depreciation	75,000				
To Profit & Loss A/C [Notional Profit]	83,73,000*				
	3,09,30,000				3,09,30,000

Dr.		Contractee's A/c		Cr.	
Particulars	Amt.	Particulars	Amt.		
To Balance c/f	2,40,00,000*	By Balance b/f [94,00,000 X 80%]			75,20,000
		By Cash/Bank A/C [3,00,00,000 - 94,00,000 = 2,06,00,000] [2,06,00,000 X 80%]			1,64,80,000
	2,40,00,000				2,40,00,000

W.N. 1: Wages

Paid	60,00,000	
Add: Outstanding at the end	30,000	
Less: Outstanding at the beginning	<u>50,000</u>	
	59,80,000	

W.N. 2: Depreciation

For first 6 months :	10,00,000 X 10% X 6/12	50,000
For next 6 months :	5,00,000 X 10% X 6/12	<u>25,000</u>

75,000

Marking System:

- 3 Marks for Contract A/C preparation
- 4 Marks for Contractee's A/C Preparation
- 1 Mark for Wages calculation
- 1 Mark for Depreciation
- 1 Mark for share of general overheads calculation

ANSWER -5

a Material Variances

Working Note 1

Original Standard	Revised Standard data For Actual Production 2,160 Units			Actual Data		
	SQ	SP Price	SC Amount	AQ Quantity Consumed	AP Price	AC Amount
FG D MAT					[1,05,600 / 24,000] = 4.40	
1 Unit 10 Kg			[21,600 X 4]			
Actual Kg 2,160 ?	21,600	4	86,400	22,800	4.40	1,00,320

(i) Material Price Variance = Actual Quantity (Std. Price – Actual Price) = 22,800 Kg (4 – 4.40)
= 9,120 (A)

(ii) Material Usage Variance
Std. Price (Std. Quantity – Actual Quantity Consumed)
Or, SP (SQ – AQ)
= 4 (21,600 – 22,800) = 4,800 (A)

(iii) Material Cost Variance = Std. Cost – Actual Cost
= ₹ 86,400 – ₹ 1,00,320 = 13,920 (A)

Labour Cost Variances

Working Note 2

Original Standard	Revised Standard data For Actual Production 2,160 Kg			Actual Data		
	SH Hours	SR Rate	SC Amount	AH Hours paid	AR Rate	AC Amount
FG HOURS						
1 Unit 2.50						
Actual 2,160 ?	5,400	4	21,600	5,940	[29,700 / 5,940] = 5	29,700

(i) Labour Cost Variance = SC – AC = 21,600 – 29,700 = 8,100 (A)

(ii) Labour Rate Variance = AH (SR – AR) = 5,940 (4 – 5) = 5,940 (A)

(iii) Labour Efficiency Variance
= SR (SH – AH)

$$= 4 (5,400 - 5,940) = 2,160 \text{ (A)}$$

Marking System:**2 Marks each for Working Notes 1 & 2****1 Marks for each of the 6 variances****b**

Sales Volume 50,000 Units

Computation of existing contribution

Particulars	Per unit (Rs.)	Total (Rs. In lakhs)
Sales	3,400	1,700
Fixed Cost	1,700	850
Profit	300	150
Contribution	2,000	1,000
Variable Cost	1,400	700

$$(i) \quad \text{Break even sales in units} = \frac{\text{Fixed cost}}{\text{Contribution per unit}} = \frac{85,00,000}{2,000} = 42,500 \text{ units}$$

$$\text{Break even sales in rupees} = 42,500 \text{ units} \times \text{Rs. } 3,400 = \text{Rs. } 1,445 \text{ lakhs}$$

OR

$$\text{P/V Ratio} = \frac{2000}{3400} \times 100 = 58.82\%$$

$$\text{B.EP (Rupees)} = \frac{\text{Fixed cost}}{\text{P/V ratio}} = \frac{8,50,00,000}{58.82\%} = \text{Rs. } 1,445 \text{ lakhs (approx.)}$$

(2 MARKS)

(ii) Number of units sold to achieve a target profit of Rs.350

lakhs: Desired Contribution = Fixed Cost + Target Profit

$$= 850 \text{ L} + 350 \text{ L} = 1,200 \text{L}$$

$$\text{Number of units to be sold} = \frac{\text{Desired contribution}}{\text{Contribution per unit}} = \frac{1,20,00,000}{2,000} = 60,000 \text{ units}$$

(2 MARKS)

(iii) Profit if selling price is increased by 15% and sales volume drops by 10%:

Existing Selling Price per unit = Rs. 3,400

Revised selling price per unit = Rs. 3,400 x 115% = Rs. 3,910

Existing Sales Volume = 50,000 units

Revised sales volume = 50,000 units – 10% of 50,000 = 45,000 units.

Statement of profit at sales volume of 45,000 units @ Rs. 3910 per unit

Particulars	Per unit (Rs.)	Total (Rs. In lakhs)
Sales	3,910.00	1,759.50
Less: Variable Costs	1,400.00	630.00
Contribution	2,510.00	1,129.50
Less: Fixed Cost		850.00
Profit		279.50

(3 MARKS)

- (iv) Volume to be achieved to earn target profit of Rs.350 lakhs with revised selling price and reduction of 8% in variable costs and Rs.85 lakhs in fixed cost:

Revised selling price per unit = Rs. 3,910

Variable costs per unit existing = Rs.1,400

Revised Variable Costs

Reduction of 8% in variable costs = Rs. 1,400 – 8% of 1,400

= Rs. 1,400 – Rs.112

= Rs.1,288

Total Fixed Cost (existing) = Rs. 850 lakhs

Reduction in fixed cost = Rs. 85 lakhs

Revised fixed cost = Rs. 850 lakhs – Rs. 85 lakhs = Rs.765 lakhs

Revised Contribution (unit) = Revised selling price per unit – Revised

Variable Costs per units Revised

Contribution per unit = Rs. 3,910 – Rs. 1,288 = Rs. 2,622

Desired Contribution = Revised Fixed Cost + Target Profit

= Rs. 765 lakhs + Rs.350 lakhs = Rs.1,115 lakhs

No. of units to be sold = $\frac{\text{Desired contribution}}{\text{Contribution per unit}} = \frac{1,115 \text{ lakh}}{2,622} = 42,525 \text{ units}$

(3 MARKS)

ANSWER -6

a

The main steps involved in installing a costing system in a manufacturing unit may be outlined as below:

- (i) The objectives of installing a costing system in a manufacturing concern and the

expectations of the management from such a system should be identified first. The system will be a simple one in the case of a single objective but will be an elaborate one in the case of multiple objectives.

- (ii) It is important to ascertain the significant variables of the manufacturing unit which are amenable to control and affect the concern. For example, quite often the production costs control may be more important than control of its marketing cost. Under such a situation, the costing system should devote greater attention to control production costs.
- (iii) A thorough study to know about the nature of business, its technical aspects; products, methods and stages of production should also be made. Such a study will facilitate in selecting a proper method of costing for manufacturing unit.
- (iv) A study of the organisation structure, its size and layout etc., is also necessary. This is useful to management to determine the scope of responsibilities of various managers.
- (v) The costing system should be evolved in consultation with the staff and should be introduced only after meeting their objections and doubts, if any. The co-operation of staff is essential for the successful operation of the system.
- (vi) Details of records to be maintained by the costing system should be carefully worked out. The degree of accuracy of the data to be supplied by the system should be determined.
- (vii) The forms to be used by foreman, workers, etc., should be standardised. These forms be suitably designed and must ensure minimum clerical work at all stages.
- (viii) Necessary arrangements should be made for the flow of information/data to all concerned managers, at different levels, regularly and promptly.
- (ix) Reconciliation of costs and financial accounts be carried out regularly, if they are maintained separately.
- (x) The costing system to be installed should be easy to understand and simple to operate.

Marking System:

1/2 mark per each point

b

There are certain steps involved in the budgetary control technique. They are as follows:

- (i) **Definition of Objectives:** A budget being a plan for the achievement of certain operational objectives, it is desirable that the same are defined precisely. The objectives should be written out; the areas of control demarcated; and items of revenue and expenditure to be covered by the budget stated.
- (ii) **Location of the key (or budget) factor:** There is usually one factor (sometimes there may be more than one) which sets a limit to the total activity. Such a factor is known as key factor. For proper budgeting, it must be located and estimated properly.
- (iii) **Appointment of controller:** Formulation of a budget usually required whole time services of senior executive known as budget controller; he must be assisted in this work by a Budget Committee, consisting of all the heads of department along with the Managing Director as the Chairman.
- (iv) **Budget Manual:** Effective budgetary planning relies on the provision of adequate information which are contained in the budget manual. A budget manual is a collection of documents that contains key information for those involved in the planning process.

- (v) **Budget period:** The period covered by a budget is known as budget period. The Budget Committee determines the length of the budget period suitable for the business. It may be months or quarters or such periods as coincide with period of trading activity.
- (vi) **Standard of activity or output:** For preparing budgets for the future, past statistics cannot be completely relied upon, for the past usually represents a combination of good and bad factors. Therefore, though results of the past should be studied but these should only be applied when there is a likelihood of similar conditions repeating in the future.

Marking System:

Any 5 Points, 1 Mark each

c

Bills of Material	Material Requisition Note
1. It is document or list of materials prepared by the engineering/ drawing department.	1. It is prepared by the foreman of the consuming department.
2. It is a complete schedule of component parts and raw materials required for a particular job or work order.	2. It is a document authorizing Store-Keeper to issue material to the consuming department.
3. It often serves the purpose of a Store Requisition as it shows the complete schedule of materials required for a particular job i.e. it can replace stores requisition.	3. It cannot replace a bill of material.
4. It can be used for the purpose of quotation.	4. It is useful in arriving historical cost only.
5. It helps in keeping a quantitative control on materials drawn through Stores Requisition.	5. It shows the material actually drawn from stores.

(5*1 = 5 MARKS)

d

The following steps are useful for minimizing labour turnover:

- Exit interview: An interview to be arranged with each outgoing employee to ascertain the reasons of his leaving the organization.
- Job analysis and evaluation: to ascertain the requirement of each job.
- Organization should make use of a scientific system of recruitment, placement and promotion for employees.
- Organization should create healthy atmosphere, providing education, medical and housing facilities for workers.
- Committee for settling workers grievances.

(5*1 = 5 MARKS)

e

Flexible Budget: A flexible budget is defined as “a budget which, by recognizing the difference between fixed, semi-variable and variable cost is designed to change in relation to the level of activity attained”. A fixed budget, on the other hand is a budget which is designed to remain unchanged irrespective of the level of activity actually attained. In a fixed budgetary control, budgets are prepared for one level of activity whereas in a flexibility budgetary control system, a series of budgets are prepared one for the each of a number of alternative production levels or volumes. Flexible budgets represent the amount of expense that is reasonably necessary to achieve each level of output specified. In other words, the allowances given under flexibility budgetary control system serve as standards of what costs should be at each level of output.

(5 Marks)

J. K. SHAH CLASSES