J.K. SHAH®
TEST SERIES
Evaluate Learn Succeed

SUGGESTED SOLUTION

CA INTERMEDIATE

Test Code – JKN_COS_12

(Date :03/10/2020)

Head Office : Shraddha, 3rd Floor, Near Chinai College, Andheri (E), Mumbai – 69.
Tel : (022) 26836666

ANSWER -1

ANSWER -A

We know that S – V = F + P

(S – Sales, V – Variable cost, F – Fixed cost and P – Profit /loss)

$\therefore$ Suppose variable cost = x per unit

Fixed Cost = y

When sales is 8,000 units, then

15 × 8,000 – 8,000 x = y – 40,000

Or, 1,20,000 – 80,000 x = y – 40,000

8,000x + y = 1,60,000……… (1)

When sales volume raised to 20,000 units, then

15 × 20,000 – 20,000 x = y + 80,000

Or 3,00,000 – 20,000 x = y + 80,000

20,000x + y = 2,20,000……(2)

Solving (1) & (2) simultaneously we get 12,000x = 60,000 Or x = 5

Variable cost per unit = Rs. 5

Putting this value in equation (1):

(8,000 × 5) + y = 1,60,000

or y = Rs. 1,20,000

Fixed Cost = Rs. 1,20,000

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

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 × Rs. 15 = Rs. 1,80,000

(5 MARKS)

ANSWER –B

(a) Annual consumption 250 kg × 52 weeks = 13,000 kg.

J.K. SHAH CLASSES

(i) Re – order Quantity or EOQ = $\sqrt{\frac{2\times A\times O}{c\times i}}$

A = Annual Consumption = 13,000 kg

O = Ordering Cost = Rs. 1,500
C = Cost per kg = Rs. 100
i = carrying cost rate = 9.75%

Carrying cost per kg per annum (c × i) = 100 × 9.75% = Rs. 9.75

$\therefore$ EOQ = $\sqrt{\frac{2\times 13{,}000\times 1{,}500}{9.75}}$

= $\sqrt{\frac{39000000}{9.75}} = 2000$ kg.

(ii) Re – order level = Max. re – order period × Max. Consumption

= 7 weeks × 300 kg = 2,100 kg

(iii) Maximum Level = Re – order level + Re – order Qty - (Min re – order Period × Min. consumption)

= 2100 kg + 2000 kg – (5 × 200) kg = 3100 kg.

(iv) Minimum level = Re order level - (Avg. re – order period × Avg. Consumption)

= 2,100 kg – (6 × 250) kg = 600 kg.

(v) Avg. Stock level = $\frac{1}{2}$ (Max. level + Min. Level)

= $\frac{1}{2}$(3,100 + 600) = 1850 kg

OR

= Minimum level + $\frac{1}{2}$ ROQ

= 600 kg. + $\frac{1}{2}\times 2000$ kg. = 1600 kg.

(5*1 = 5 MARKS)

ANSWER -C

(a) Calculation of Total Cost for the Hostel Job

Particulars	Amount (Rs.)	Amount (Rs.)
Direct Material Cost:		
- 15mm GI Pipe (Working Note- 1)	11,051.28	
- 20mm GI Pipe (Working Note- 2)	2,588.28	
- Other fitting materials (Working Note- 3)	3,866.07	

J. K. SHAH CLASSES

- Stainless steel faucet 15 units × $\left(\frac{6 \times Rs.204+15 \times Rs.209}{21\ units}\right)$	3,113.57	
- Valve 6 units × $\left(\frac{8 \times Rs.404+10 \times Rs.402+14 \times Rs.424}{32\ units}\right)$	<u>2,472.75</u>	23,091.95
Direct Labour:		
Plumber [(180 hours × Rs. 50) + (12 hours × Rs. 25)]	9,300.00	
Helper [(192 hours × Rs. 35) + (24 hours × Rs. 17.5)]	<u>7,140.00</u>	16,440.00
- Overheads [Rs. 13 × (180 + 192) hours]		4,836.00
Total Cost		**44,367.95**

(b) Price to be charged for the job work:

	Amount (Rs.)
Total Cost incurred on the Job	44,367.95
Add: 25% Profit on Job Price $\left(\frac{44{,}367.95}{75\%} \times 25\%\right)$	14,789.32
	59,157.27

Working Note:

1. Cost of 15mm GI Pipe

Date		**Amount (Rs.)**
17-08-2019	8 units × Rs. 600	4,800.00
28-08-2019	10 × $\left(\frac{4 \times Rs.600+35 \times Rs.628}{39\ units}\right)$	6,251.28
		11,051.28

2. Cost of 20mm GI Pipe

Date		**Amt (Rs.)**
12-08-2019	2 units × Rs. 660	1,320.00
28-08-2019	$2\ units \times \left(\frac{8 \times Rs.660 + 30 + Rs.610 + 20 \times Rs.660}{58\ units}\right)$	1,268.28
		2,588.28

3. Cost of Other Fitting materials

Date		**Amount (Rs.)**
12.08.2019	18 units × Rs. 26	468.00
17.08.2019	30 units × Rs. 26	780.00
28.08.2019	34 units × $\left(\frac{12 \times Rs.26+150 \times Rs.28}{162\ units}\right)$	946.96
30.08.2019	60 units × $\left(\frac{12 \times Rs.26+150 \times Rs.28}{162\ units}\right)$	1,671.11
		3,866.07

J.K. SHAH CLASSES

[½ Marks for each 5 RM + ½ Marks for 2 Labour + ½ for overheads + 1 Mark for Profit Total 5 Marks]

ANSWER - D

The Cost of labour under the bonus schemes are tabulated as below:

Time Allowed	Time taken	Wages (Rs.)	Bonus (Rs.)		Total Wages (Rs.)		Earning per hour (Rs.)	
			Halsey*	Rowan**	Halsey	Rowan	Halsey	Rowan
(1)	(2)	(3) = (2) ×Rs. 80	(4)	(5)	(6) = (3) + (4)	(7) = (3) + (5)	(8) = (6)/(2)	(9) = (7)/(2)
24,960	24,960 (24960 x 100%)	19,96,800	-	-	19,96,800	19,96,800	80.00	80.00
24,960	18,720 (24960 x 75%)	14,97,600	2,49,600	3,74,400	17,47,200	18,72,000	93.33	100.00
24,960	12,480 (24960 x 50%)	9,98,400	4,99,200	4,99,200	14,97,600	14,97,600	120.00	120.00
24,960	6,240 (24960 x 25%)	4,99,200	7,48,800	3,74,400	12,48,000	8,73,600	200.00	140.00

* Bonus under Halsey Plan = 50% of (Time Allowed – Time Taken) × Rate per hour

** Bonus under Rowan Plan = $\frac{\text{Time taken}}{\text{Time allowed}} \times \text{Time saved} \times \text{Rate per hour}$

Rowan scheme of bonus keeps checks on speed of work as the rate of incentive increases only upto 50% of time taken to time allowed but the rate decreases as the time taken to time allowed comes below 50%. It provides incentives for efficient workers for saving in time but also puts check on careless speed. On implementation of Rowan scheme, the management of ADV Pvt. Ltd. would resolve issue of the slow speed work while maintaining the skill and precision required maintaining the quality of product.

[1 Marks for each row of above table & 1 Mark for comment = 5 Marks]

ANSWER -2

ANSWER –A

(i) Statement of profitability of an Oil Mill (after carrying out further processing) for the quarter ending 31st March 2019.

Products	Sales Value after further processing	Share of Joint cost	Additional processing cost	Total cost after processing	Profit (loss)
A	25,87,500	14,80,000	6,45,000	21,25,000	4,62,500
B	2,25,000	2,96,000	1,35,000	4,31,000	(2,06,000)
C	90,000	74,000	-	74,000	16,000
D	6,75,000	3,70,000	22,500	3,92,500	2,82,500
	35,77,500	22,20,000	8,02,500	30,22,500	5,55,000

(5 MARKS)

(ii) Statement of profitability at the split off point

Products	Selling price of split off	Output in units	Sales value at split off point	Share of joint cost	Profit at split off point
A	225.00	8,000	18,00,000	14,80,000	3,20,000
B	90.00	4,000	3,60,000	2,96,000	64,000
C	45.00	2,000	90,000	74,000	16,000
D	112.50	4,000	4,50,000	3,70,000	80,000
			27,00,000	22,20,000	4,80,000

Note: Share of Joint Cost has been arrived at by considering the sales value at split off point.

(5 MARKS)

J. K. SHAH CLASSES

ANSWER –B

Workings:

Total labour hours and overhead cost:

Particulars	Product X	Product Y	Product Z	Total
Production units -A	45,000	52,500	30,000	1,27,500
Overhead cost per unit (Rs.)- B	240	400	560	
Total overhead-A*B				6,07,500
Rs. In Lac	108	210	168	486

Cost per activity and driver

Activity	Machine Set-up	Customer order processing	Customer complaint management	Total
Total overhead (Rs.)	1,45,80,000 (30%)	1,45,80,000 (30%)	1,94,40,000 (40%)	4,86,00,000 (100%)
No. of drivers	600	2,400	8,000	
Cost per driver (Rs.)	24,300	6,075	2,430	

(i) Computation of Overhead cost per unit:

Particulars	Product X	Product Y	Product Z
No. of machine set-ups	40	160	400
Cost per driver (Rs.)	24,300	24,300	24,300
Total Machine set-up cost (Rs.) [A]	**9,72,000**	**38,88,000**	**97,20,000**
No. of purchase orders	400	800	1,200
Cost per driver (Rs.)	6,075	6,075	6,075
Total order processing cost (Rs.) [B]	**24,30,000**	**48,60,000**	**72,90,000**
No. of customers	1,000	2,200	4,800
Cost per driver (Rs.)	2,430	2,430	2,430
Total customer complaint management cost (Rs.) [C]	**24,30,000**	**53,46,000**	**1,16,64,000**
Total Overhead cost **(Rs.) [A+B+C]**	58,32,000	1,40,94,000	2,86,74,000
Production units	45,000	52,500	30,000

J. K. SHAH CLASSES

Cost per unit (Rs.)	129.60	268.46	955.80

(7 MARKS)

(ii) Determination of Selling price per unit

Particulars	Product X (using machine A)	Product Y (using machine B)	Product Z (using machine C)
Material cost per unit (Rs.)	350.00	460.00	410.00
Wages per unit @ Rs.80 per hour	240.00	400.00	560.00
Overhead cost per unit (Rs.)	129.60	268.46	955.80
Total cost per unit (Rs.)	719.60	1,128.46	1,925.80
*Profit (25% profit mark-up) (Rs.)	179.90	282.11	481.45
Selling price (Rs.)	**899.50**	**1,410.57**	**2,407.25**

***Calculation of profit mark-up on cost**

	X	Y	Z	TOTAL
Units	45,000	52,500	30,000	
Total cost per unit (Rs.)	830	1,260	1,530	
Total Cost	***3,73,50,000***	***6,61,50,000***	***4,59,00,000***	***14,94,00,000***
Selling price (Rs.)	1,038	1,575	1,913	
Profit per unit (Selling price - Cost)	207.5	315	382.5	
Total Profit	***93,37,500***	***1,65,37,500***	***1,14,75,000***	***3,73,50,000***

Calculation of profit mark-up on cost

= [Total Profit / Total Cost] x 100 = [3,73,50,000/14,94,00,000] x100 = 25% on Cost

(3 MARKS)

ANSWER – 3

ANSWER – A

(i) Table of Primary Distribution of Overheads

Particulars	Basis of Apportionment	Total Amount	Production Department		Service Departments	
			Fabrication	Assembly	Stores	Maintenance
Overheads Allocated		27,28,000	15,52,000	7,44,000	2,36,000	1,96,000
Other Overheads:						
Factory rent	Floor Area (48:20:5:7)	**15,28,000**	9,16,800	3,82,000	95,500	1,33,700
Factory building insurance	Floor Area (48:20:5:7)	**1,72,000**	1,03,200	43,000	10,750	15,050
Plant & Machinery insurance	Value of Plant & Machinery	**1,96,000**	1,22,038	55,472	5,547	12,943

J. K. SHAH CLASSES

	(66:30:3:7)					
Plant & Machinery Depreciation	Value of Plant & Machinery (66:30:3:7)	**2,65,000**	1,65,000	75,000	7,500	17,500
Canteen Subsidy	No. of employees (60:40:19:6)	**4,48,000**	2,15,040	1,43,360	68,096	21,504
		53,37,000	30,74,078	14,42,832	4,23,393	3,96,697

Re-distribution of Service Departments' Expenses:

Particulars	Basis of Apportionment	Production Department		Service Departments	
		Fabrication	Assembly	Stores	Maintenance
Overheads as per Primary distribution	As per Primary distribution	30,74,078	14,42,832	4,23,393	3,96,697
Maintenance Department Cost	Maintenance Hours (28:23:4:-)	2,01,955	1,65,891	28,851	(3,96,697)
		32,76,033	16,08,723	4,52,244	---
Stores Department	No. of Stores Requisition (18:7:-:-)	3,25,616	1,26,628	(4,52,244)	
		36,01,649	17,35,351	---	---

Note:- Maintenance department renders service to stores, but stores does not render any service to maintenance department, hence overheads of Maintenance should be distributed first.

(6 MARKS)

(ii) Overhead Recovery Rate

Department	Apportioned Overhead (Rs.) (I)	Basis of Overhead Recovery Rate (II)	Overhead Recovery Rate (Rs.) [(I) ÷ (II)]
Fabrication	36,01,649	30,00,000 Machine Hours	1.20 per Machine Hour
Assembly	17,35,351	26,00,000 Labour Hours	0.67 per Labour Hour

(2 MARKS)

(iii) Calculation of full production costs of Job no. IGI2019.

Particulars	Amount (Rs.)
Direct Materials	2,30,400
Direct Labour:	
Fabrication Deptt. (240 hours × Rs.50)	12,000
Assembly Deptt. (180 hours × Rs.50)	9,000
Production Overheads:	
Fabrication Deptt. (210 hours × Rs. 1.20)	252
Assembly Deptt. (180 hours × Rs. 0.67)	121
Total Production Cost	2,51,773

(2 MARKS)

ANSWER – B

Statement showing the Operating Cost per Passenger – km.

	Yearly (Rs.)	Monthly (Rs.)
(A) Standing Charges :		
Insurance Charge Rs. 20,00,000 × 3%	60,000	5,000
Road Tax	36,000	3,000
Depreciation (20,00,000/5)	4,00,000	33,333.33
Total	4,96,000	41,333.33
(B) Maintenance Charges :		
Annual Repairs	50,000	4166.67
Office and administration overheads	3,18,000	26,500
Total	3,68,000	30,666.67
(C) Running Cost/ Charges :		
Driver's Salary	2,40,000	20,000
Conductor's salary	1,80,000	15,0000
Diesel & Oil $\left(60{,}000 \times \frac{1{,}500}{100}\right)$	9,00,000	75,000
Total	13,20,000	14,333.33
Total (A + B + C) Cost before commission and profit	21,84,000	1,82,000
Commission (33,60,000 × 10%) (working note 2)	3,36,000	28,000
Profit (33,60,000 × 25%) (working note 2)	8,40,000	70,000
Takings (working note 1)	33,60,000	2,80,000

(7 MARKS)

(ii) Fare per Passenger – km . = $\frac{Total\ Collection\ /Takings}{Total\ Passenger\!-\!km\ (Working\ note\ 3)}$

= $\frac{33{,}60{,}000}{24{,}00{,}000}$ = Rs. 1.40

OR

Fare per Passenger – km. (monthly) = $\frac{2{,}80{,}000}{2{,}00{,}000}$ = Rs. 1.40

Working Note :

J. K. SHAH CLASSES

1. Cost before commission (10%) and Profit (25%) is 21,84,000 which is 65% of total takings. So total takings is (21,84000 ÷ 65) × 100 = Rs. 33,60,000
2. Commission is 10% of Rs. 33,60,000 = Rs. 3,36,000 and Profit is 25% of Rs. 33,60,000 = Rs. 8,40,000.
3. Total Km is (4 Round Trips × Days in a month × Month = (4 × 2 × 25 × 25 × 12) = 60,000 km

Passenger km is 60,000 km × 40 passenger = 24,00,000

(3 MARKS)

ANSWER – 4

ANSWER – A

Current Year Cost Structure

WN-1 Statement of total variable cost per unit.

Particulars	Rs.
Direct Material	150
Direct Wages	50
Works Overhead (125 x 50%)	62.5
Selling Expense (50 x 25%)	12.5
Total Variable cost per unit	**275**

WN-2 Total Fixed Cost

Particulars	Rs.
Works Overhead (125 x 50%)	62.5
Selling Expense (50 x 75%)	37.5
Total (A)	100
Units (B)	5,000 units
Total Fixed Cost	**5,00,000**

WN-3 Statement of Desire Profit

Particulars	Rs.
Selling Price per unit	500
Less: Total Variable Cost per unit (WN-1)	(275)
Contribution per unit (A)	225
Total units (B)	5,000 units
Total Contribution (A x B)	11,25,000
Less: Total Fixed Cost (WN-2)	(5,00,000)
Desire Profit	**6,25,000**

Changes in next year cost structure

WN-4 Statement of revised Total Variable Cost

Particulars	Rs.
Direct Material (150 + 5%)	157.5
Direct Wages (50 + 20%)	60
Works Overhead	62.5
Selling Expense	12.5
Total Variable Cost per unit	**292.5**

WN-5 Revised total fixed cost

5,00,000 + 10% = Rs. 5,50,000

J. K. SHAH CLASSES

Statement of Minimum selling price of additional 2,000 sticks

Desire Profit	6,25,000
Add: Fixed Cost (WN-5)	5,50,000
Total Desire Contribution	**11,75,000**
Add: Total Variable Cost (292.5 x 7,000) (WN-4)	20,47,500
Total Sales	**32,22,500**
Less: Sales of 5000 units (500 x 5000)	(25,00,000)
Minimum Sales Value of 2000 units	**7,22,500**
Minimum selling price p.u. for additional 2000 units (7,22,500 ÷ 2,000)	**361.25**

(5*2 = 10 MARKS)

ANSWER – B

Cost Sheet

(for the quarter ending 30 September 2018)

	Amount (Rs.)
(i) Raw materials consumed	
Opening stock of raw materials	2,45,600
Add: Purchase of materials	12,22,650*
Less: Closing stock of raw materials	(2,08,000)
Raw materials consumed	12,60,250
Add: Direct wages	2,57,250
Direct Expenses	1,80,000
(ii) Prime cost	**16,97,500**
Add: Factory overheads (2,57,250/175%)	1,47,000
Gross Factory cost	18,44,500
Add: Opening work-in-process	1,70,800
Less: Closing work-in-process	(1,90,000)
(iii) Factory cost	**18,25,300**
Add: Administration overheads (10% of factory overheads)	14,700
Add: Opening stock of finished goods	3,10,000
Less: Closing stock of finished goods	(2,75,000)
(iv) Cost of goods sold [Given]	**18,75,000**
Add: Selling & distribution overheads	60,000
Cost of sales	19,35,000

J. K. SHAH CLASSES

(v) Net Profit	**2,75,000**
Sales	22,10,000

*(18,75,000 + 2,75,000 – 3,10,000 – (1,47,000 × 10%) + 1,90,000 –1,70,800 – (2,57,250 × 100/175%) - 1,80,000 – 2,57,250 + 2,08,000 – 2,45,600) = 12,22,650

Working notes

Purchase of raw materials = Raw material consumed + Closing stock - opening stock of raw material

Raw material consumed = Prime cost - Direct wages - Direct expenses

Factory Overheads = 2,57,250*100/175

Prime cost = Factory cost + Closing WIP – Opening WIP – Factory overheads

Factory Cost = Cost of Production goods sold + Closing stock of Finished goods – Opening stock of finished goods – Administrative overheads

Net Profit = Sales - Cost of sales

Note:- It is assumed that Administration overheads are related to production

(10 MARKS)

Alternative solution

If Administration overheads is assumed to be related to sales.

Cost Sheet

(for the quarter ending 30 September 2018)

	Amount (Rs.)
(i) Raw materials consumed	
Opening stock of raw materials	2,45,600
Add: Purchase of materials	12,37,350*
Less: Closing stock of raw materials	(2,08,000)
Raw Material consumed	12,74,950
Add: Direct wages (1,47,000×175%	2,57,250
Direct Expenses	1,80,000
(ii) Prime cost	**17,12,,200**
Add: Factory overheads (2,57,250/175%)	1,47,000
Gross Factory cost	18,59,200
Add: Opening work-in-process	1,70,800

J. K. SHAH CLASSES

Less: Closing work-in-process	(1,90,000)
(iii) Factory cost/works cost/cost of production	**18,40,000**
Add: Opening stock of finished goods	3,10,000
Less: Closing stock of finished goods	(2,75,000)
(iv) Cost of goods sold	**18,75,000**
Add: Administration overheads (10% of factory overheads)	14,700
Add: Selling & distribution overheads	60,000
Cost of sales	19,49,700
(v) Net Profit	**2,60,300**
Sales	22,10,000

*(18,75,000 + 2,75,000 – 3,10,000 + 1,90,000 –1,70,800 – 1,47,500 - 1,80,000 – 2,57,250 + 2,08,000 – 2,45,600) = 12,37,350

Working notes

Purchase of raw materials = Raw material consumed + Closing stock - opening stock of raw material

Raw material consumed = Prime cost - Direct wages - Direct expenses

Factory Overheads = 257250*100/175

Prime cost = Factory cost + Closing WIP – Opening WIP – Factory overheads

Factory Cost = Cost of Production goods sold + Closing stock of Finished goods – Opening stock of finished goods

Net Profit = Sales - Cost of sales

ANSWER – 5

ANSWER – A

Process-A A/c

Particulars	**Total (Rs.)**	**Cost (Rs.)**	**Profit (Rs.)**	**Particulars**	**Total (Rs.)**	**Cost (Rs.)**	**Profit (Rs.)**
Opening stock	5,000	5,000	_	Process B A/c	28,800	21,600	7,200
Direct materials	9,000	9,000	_				
Direct wages	5,000	5,000	_				

J. K. SHAH CLASSES

	19,000	19,000	_				
Less: Closing stock	(2,000)	(2,000)	_				
Prime Cost	17,000	17,000	_				
Overheads	4,600	4,600	_				
Process Cost	21,600	21,600	_				
Profit (33.33% of total cost)	7,200	-	7,200				
	28,800	21,600	7,200		28,800	21,600	7,200

(4 MARKS)

Process-B A/c

Particulars	**Total (Rs.)**	**Cost (Rs.)**	**Profit (Rs.)**	**Particulars**	**Total (Rs.)**	**Cost (Rs.)**	**Profit (Rs.)**
Opening stock	5,500	4,500	1,000	Finished stock A/c	61,675	41,550	20,125
Process A A/c	28,800	21,600	7,200				
Direct materials	9,500	9,500	_				
Direct wages	6,000	6,000	_				
	49,800	41,600	8,200				
Less: Closing stock	(2,490)	*(2,080)	(410)				
Prime Cost	47,310	39,520	7,790				
Overheads	2,030	2,030	_				
Process Cost	49,340	41,550	7,790				
Profit (25% of total cost)	12,335	-	12,335				
	61,675	41,550	20,125		61,675	41,550	20,125

*** Cost of Closing Stock = [2,490/49800]41600 = 2,080; Profit in closing stock = 2,490-2,080 = 410**

(4 MARKS)

Finished Stock A/c

Particulars	**Total (Rs.)**	**Cost (Rs.)**	**Profit (Rs.)**	**Particulars**	**Total (Rs.)**	**Cost (Rs.)**	**Profit (Rs.)**
Opening stock	10,000	6,000	4,000	Costing P&L A/c	75,000	44,182	30,818
Process B A/c	61,675	41,550	20,125				
	71,675	47,550	24,125				
Less: Closing stock	(5,000)	**(3,368)	(1,632)				
COGS	66,675	44,182	22,493				
Profit	8,325	-	8,325				
	75,000	44,182	30,818		75,000	44,182	30,818

**** Cost of Closing Stock = [5,000/61,675] 41,550 = 3,368; Profit in closing stock = 5,000-3,368 = 1,632**

J. K. SHAH CLASSES

(2 MARKS)

ANSWER – 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

(1.5 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

(3.5 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 *per bag*	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 – 6

ANSWER – A

Particulars	Explicit Costs	Implicit Costs
1. Meaning	Costs which involve some cash payment or outflow of resources.	Costs which do not involve any cash payment at all.
2. Also known as	Out-Of-Pocket Costs.	Economic / Notional / Imputed Costs.
3. Measurement	These are **actually incurred**, and hence can be easily and **objectively** measured.	They are not actually incurred. They cannot be easily measured and involve **subjective estimation**.
4. Recording in books	**Recorded** in books of account.	**Not recorded** in books of account.
5. Purposes	Accounting, Reporting, Cost Control & Decision Making.	Decision-Making like asset replacement, make or buy, etc.
6. Examples	Salaries, Wages, Advertisement, etc.	Interest on own capital, Rent of own premises, Salary of Proprietor, etc. which are not actually paid.

(5 MARKS)

ANSWER – B

Flexible budgeting may be resorted to under following situations:

(i) In the case of new business venture due to its typical nature it may be difficult to forecast the demand of a product accurately.

(ii) Where the business is dependent upon the mercy of nature e.g., a person dealing in wool trade may have enough market if temperature goes below the freezing point.

(iii) In the case of labour-intensive industry where the production of the concern is dependent upon the availability of labour.

Suitability for flexible budget:

1. Seasonal fluctuations in sales and/or production, for example in soft drinks industry;
2. a company which keeps on introducing new products or makes changes in the

J.K. SHAH CLASSES

design of its products frequently;

3. industries engaged in make-to-order business like ship building;
4. an industry which is influenced by changes in fashion; and
5. General changes in sales.

(5 MARKS)

ANSWER – C

Particulars		Dr.	Cr.
i) Store ledger Control A/c	Dr.	27,000	
To Cost ledger control A/c			27,000
ii) Work in Progress ledger control A/c	Dr.	6,000	
To Production overhead control A/c			6,000
iii) Cost of Sales	Dr.	4,000	
To Selling and Distribution overhead control A/c			4,000
iv) (1) Wages Ledger Control A/c	Dr.	8,000	
To Cost ledger control A/c			8,000
(2) Manufacturing Overhead Control A/c	Dr.	8,000	
To Wages Ledger Control A/c			8,000
Or			
Manufacturing Overhead Control A/c	Dr.	8,000	
To Cost ledger control A/c			8,000
v) Store ledger Control A/c	Dr.	9,000	
To Work in Progress ledger control A/c			9,000

(5*1 = 5 MARKS)

ANSWER – D

There are four types of responsibility centres:

(i) **Cost Centres:** The responsibility centre which is held accountable for incurrence of costs which are under its control. The performance of this responsibility centre is measured against pre-determined standards or budgets. The cost centres are of two types:

(a) Standard Cost Centre and (b) Discretionary Cost Centre

(ii) **Revenue Centres:** The responsibility centres which are accountable for generation of revenue for the entity. Sales Department for example, is the responsible for achievement of sales target and revenue generation. Though, revenue centres does not have control on the all expenditures it incurs but some time expenditures related with selling activities like commission to sales person etc. are incurred by revenue centres.

(iii) Profit Centres: These are the responsibility centres which have both responsibility of generation of revenue and incurrence of expenditures. Since, managers of profit centres are accountable for both costs as well as revenue, profitability is the basis for measurement of performance of these responsibility centres. Examples of profit centres are decentralized branches of an organization.

J. K. SHAH CLASSES

(iv) Investment Centres: These are the responsibility centres which are not only responsible for profitability but also has the authority to make capital investment decisions. The performance of these responsibility centres is measured based on Return on Investment (ROI) besides profit.

(5 MARKS)

ANSWER – E

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.

(5 MARKS)

J.K. SHAH CLASSES