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TEST SERIES

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SUGGESTED SOLUTION

CA INTERMEDIATE

SUBJECT- COSTING

Test Code – JKN_COS_13

BRANCH - () (Date :)

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ANSWER 1(A)

1.

	Annual cost of each employee	Rs..
1.	Salary (30,000×12)	3,60,000
2.	Bonus (25% of Salary)	90,000
3.	Employees Contribution to PF (15% of Salary)	54,000
4.	Employers welfare (661500/175)	3,780
	Total Annual Cost	5,07,780

2.

Effective Working hours (310 days × 8 hours)	2480 hours
Less: Leave days (30 days × 8 hours)	240 hours*
Available Working hours	2240 hours
Less: Normal Loss @	70 hours
	2170 hours

$$\text{Employee Cost per hour} = \frac{507780}{2170} = \text{Rs. } 234$$

*It is assumed 310 working days are without taking leave permitted into consideration

3. Cost of abnormal idle time per employee = Rs. 234 × 50 hours = Rs. 11700

Alternative solution for Part (2) and (3)

(2) Calculation of Employee cost per hour:

Working hours per annum	2,480 *
Less: Normal Idle time hours	70
Effective hours	2,410
Employee cost	5,07,780
Employee cost per hour	210.70

*It is assumed 310 working days are after adjusting leave permitted during the year.

(3) Cost of Abnormal idle time per employee:

Abnormal Idle time hours	50
Employee cost per hour	210.70
Cost of Abnormal idle time (210.70 × 50)	10,534.85

ANSWER 1(B)**Workings :**

Take the good output of 195 ltr. The standard quantity of material required for 195 ltr. Of output is

$$\frac{195}{80} \times 100 = 243.75 \text{ ltr.}$$

Statement showing computation of Standard Cost / Actual Cost / /Revised Actual Quantity

Material	Standard cost			Actual Cost		
	Quantity	Rate	Amt.	Quantity	Rate	Amount
	[SQ] (Kg.)	[SP] (Rs.)	[SQ × SP]	[AQ] (Kg.)	[AP] (Rs.)	[AQ × AP] (Rs.)
A (60% of 243.75 ltr.)	146.25	40	5,850.00	140	42	5,880
B (40% of. 243.75 Kg.)	97.50	60	5,880.00	110	56	6,160
	243.75		11,700.00	200		12,040

Note : SQ = Standard Quantity = Expected Consumption for Actual Output

AQ = Actual Quantity of Material Consumed

SP = Standard Price per Unit

AP = Actual Price per Unit

Computation of Variances :

Material Cost Variance = SQ × SP – AQ × AP

$$A = \text{Rs. } 146.25 \text{ ltr.} \times \text{Rs. } 40 - 140 \text{ ltr.} \times \text{Rs. } 42 = \text{Rs. } 30.00 \text{ (A)}$$

$$B = \text{Rs. } 97.50 \text{ ltr.} \times \text{Rs. } 60 - 110 \text{ ltr.} \times \text{Rs. } 56 = \text{Rs. } 310.00 \text{ (A)}$$

$$\text{Total} = \text{Rs. } 30.00 \text{ (A)} + \text{Rs. } 310.00 \text{ (A)}$$

$$= \text{Rs. } 340.00 \text{ (A)}$$

Material Usage Variance = SP × (SQ – AQ)

$$A = \text{Rs. } 40 \times (146.25 \text{ ltr.} - 140 \text{ ltr.}) = \text{Rs. } 250.00 \text{ (F)}$$

$$B = \text{Rs. } 60 \times (97.50 \text{ ltr.} - 110 \text{ ltr.}) = \text{Rs. } 750.00 \text{ (A)}$$

$$\text{Total} = \text{Rs. } 250.00 \text{ (F)} + \text{Rs. } 750.00 \text{ (A)}$$

$$= \text{Rs. } 500.00 \text{ (A)}$$

Material Price Variance = AQ × (SP – AP)

$$A = 140 \text{ Kg.} \times (\text{Rs. } 40 - \text{Rs. } 42) = \text{Rs. } 280 \text{ (A)}$$

$$B = 110 \text{ Kg.} \times (\text{Rs. } 60 - \text{Rs. } 56) = \text{Rs. } 440 \text{ (F)}$$

$$\text{Total} = \text{Rs. } 280 \text{ (A)} + \text{Rs. } 440 \text{ (F)} = \text{Rs. } 160 \text{ (F)}$$

ANSWER 1(C)

Total Joint Cost

	Amount (Rs.)
Direct Material	30,000
Direct Labour	9,600
Variable Overheads	12,000
Total Variable Cost	51,600
Fixed Overheads	32,000
Total joint cost	83,600

Apportionment of Joint Costs:

			Product-A	Product-B
I.	(i)	Apportionment of Joint Cost on the basis of 'Physical Quantity'	₹ 38,000 $\left(\frac{₹ 83,600}{100 + 120 \text{ units}} \times 100 \right)$	₹ 45,600 $\left(\frac{₹ 83,600}{100 + 120 \text{ units}} \times 120 \right)$
	(ii)	Apportionment of Joint Cost on the basis of 'Contribution Margin Method':		
		- Variable Costs (on basis of physical units)	₹ 23,455 $\left(\frac{₹ 51,600}{100 + 120 \text{ units}} \times 100 \right)$	₹ 28,145 $\left(\frac{₹ 51,600}{100 + 120 \text{ units}} \times 120 \right)$
		Contribution Margin	36,545 (₹600×100 – 23,455)	-4,145 (₹200×120 – 28,145)
		Fixed Costs*	₹ 32,000	
		Total apportioned cost	₹ 55,455	₹ 28,145

II.	(iii)	Profit or Loss:		
	When Joint cost apportioned on basis of physical units			
	A.	Sales Value	₹ 60,000	₹ 24,000
	B.	Apportioned joint cost on basis of 'Physical Quantity':	₹ 38,000	₹ 45,600
	A-B	Profit or (Loss)	22,000	(21,600)
	When Joint cost apportioned on basis of 'Contribution Margin Method'			
	C	Apportioned joint cost on basis of 'Contribution Margin Method'	₹ 55,455	₹ 28,145
A-C	Profit or (Loss)	₹ 4,545	₹ (4,145)	

* The fixed cost of Rs. 32,000 is to be apportioned over the joint products A and B in the ratio of their contribution margin but contribution margin of Product B is Negative so fixed cost will be charged to Product A only.

ANSWER 1(D)

(i) Production Budget for January to March 2014 (Quantitative)

	Jan	Feb	Mar	April
Budgeted Sales	10,000	12,000	14,000	15,000
Add: Budgeted Closing Stock (20% of sales of next month)	2,400	2,800	3,000	3,000
	12,400	14,800	17,000	18,000
Less: Opening Stock	2,700	2,400	2,800	3,000
Budgeted Output	9,700	12,400	14,200	15,000

Total Budgeted Output for the Quarter ended March 31, 2014

$$= (9,700 + 12,400 + 14,200) = 36,300 \text{ units.}$$

(ii) Raw Material Consumption Budget (in quantity)

Month	Budgeted Output (Units)	Material 'X' @ 4 kg per unit (Kg)	Material 'Y' @ 6 kg per unit (Kg)
January	9,700	38,800	58,200
February	12,400	49,600	74,400
March	14,200	56,800	85,200
April	15,000	60,000	90,000
Total		2,05,200	3,07,800

(iii) Raw Materials Purchase Budget for the Quarter ended March 31, 2014 (in quantity)

	Material X (kg)	Material Y (kg)
Raw material required for production*	1,45,200	2,17,800
Add: Closing Stock of raw material**	30,000	45,000
	1,75,200	2,62,800
Less: Opening Stock of raw material	19,000	29,000
Material to be purchased	1,56,200	2,33,800

*Quarterly Consumption = Quarterly production × Qty. of Raw material needed per unit.

Hence for Material X it is $36,300 \times 4 \text{ kg} = 1,45,200$;

Material Y it is $36,300 \times 6 \text{ kg} = 2,17,800$.

**Closing Stock of Raw material = $\frac{1}{2} \times$ Consumption of R/m of next month

∴ Closing stock of Material X = $\frac{1}{2} \times 60,000 = 30,000 \text{ kg}$

∴ Closing stock of Material Y = $\frac{1}{2} \times 90,000 = 45,000 \text{ kg}$

ANSWER 2(A)

$$\begin{aligned} \text{Margin of Safety} &= \frac{\text{Profit}}{\text{P / V ratio}} = ₹ 4,12,500 \\ &= \frac{\text{Profit}}{45 - (12 + 9 + 6)} = ₹ 4,12,500 \\ &= \frac{\text{Profit}}{18} = 4,12,500 \\ &= \frac{\text{Profit}}{45} \end{aligned}$$

$$\text{Profit} = 1,65,000 \quad \text{OR P/V} = (18/45) \times 100 = 40\%$$

(i) Fixed Cost

$$\text{Profit} = (\text{Sales} \times \text{P/V Ratio}) - \text{Fixed Cost}$$

$$1,65,000 = \left((30,000 \times 45) \times \frac{18}{45} \right) - \text{Fixed Cost}$$

$$\begin{aligned} \text{Or Fixed Cost} &= 5,40,000 - 1,65,000 \\ &= ₹ 3,75,000 \end{aligned}$$

OR

$$\text{Profit} = \text{Contribution} - \text{Fixed Cost} = ₹ 5,40,000 - ₹ 3,75,000 = ₹ 1,65,000$$

$$\text{P/V Ratio} = \frac{18}{45} = 40\%$$

$$\begin{aligned} \text{Break-even Point} &= \text{Total Sales} - \text{Margin of Safety} \\ &= ₹ (30,000 \times 45) - 4,12,500 \\ &= 13,50,000 - 4,12,500 = ₹ 9,37,500 \end{aligned}$$

Or

$$\text{BEP} = \frac{\text{Fixed Cost}}{\text{P / V ratio}} = \frac{3,75,000}{\frac{18}{45}} = \frac{3,75,000}{40\%} = ₹ 9,37,500 \quad \text{OR } 20833.33 \text{ Units}$$

- (ii) Let's assume, Sales Volume = S unit so total sales value is 45 S and
 Contribution is 45 S - 27 S = 18 S
 Now, Contribution = Fixed Cost + Desired Profit
 18 S = 3,75,000 + 9 S (20% of 45 S)
 Or, 9S = 3,75,000
 So, S = $\frac{3,75,000}{9}$ Units

$$\text{Volume of sales} = \frac{3,75,000 \times 45}{9} = ₹ 18,75,000 \text{ OR } 41666.67 \text{ Units}$$

So, ₹ 18,75,000 sales are required to earn profit on 20% of sales

$$\begin{aligned} \text{(iii) Contribution} &= \text{Fixed Cost} + \text{Desired Profit} \\ 18S &= 3,75,000 + \text{Return on Investment} \\ 18S &= 3,75,000 + 2,00,000 \\ S &= \frac{5,75,000}{18} \text{ Units} = 31,945 \text{ Units (approx.)} \end{aligned}$$

So, 31,945 Units to be sold to earn a return of ₹ 2,00,000.

$$\begin{aligned} \text{(iv) Revised Contribution} &= \text{Fixed Cost} + \text{Desired Profit} \\ 17S &= 3,75,000 + 2,00,000 \\ S &= \frac{5,75,000}{17} \text{ Units} \\ S &= 33,824 \text{ units (approx.)} \end{aligned}$$

∴ Additional Sales to be sold to achieve the same profit is 33,824 Units.

ANSWER 2(B)

Working Notes:

(i) Total Room days in a year

Season	Occupancy (Room-days)	Equivalent Full Room charge days
Season – 80% Occupancy	200 Rooms × 80% × 6 months × 30 days in a month = 28,800 Room Days	28,800 Room Days × 100% = 28,800
Off-season – 40% Occupancy	200 Rooms × 40% × 6 months × 30 days in a month = 14,400 Room Days	14,400 Room Days × 50% = 7,200
Total Room Days	28,800 + 14,400 = 43,200 Room Days	36,000 Full Room days

(ii) Lighting Charges:

It is given in the question that lighting charges for 8 months is Rs.110 per month and during winter season of 4 months it is Rs.30 per month. Further it is also given that peak season is 6 months and off season is 6 months.

It should be noted that – being Hill station, winter season is to be considered as part of Off season. Hence, the non-winter season of 8 months include – Peak season of 6 months and Off season of 2 months.

Accordingly, the lighting charges are calculated as follows:

Season	Occupancy (Room-days)
Season & Non-winter – 80% Occupancy	200 Rooms × 80% × 6 months × Rs. 110 per month = Rs. 1,05,600
Off- season & Non-winter – 40% Occupancy (8 – 6 months)	200 Rooms × 40% × 2 months × Rs.110 per month = Rs. 17,600
Off- season & -winter – 40% Occupancy months)	200 Rooms × 40% × 4 months × Rs. 30 per month = Rs. 9,600
Total Lighting charges	Rs. 1,05,600+ Rs. 17,600 + Rs. 9,600 = Rs. 132,800

Statement of total cost:

	(Rs.)
Staff salary	8,00,000
Repairs to building	3,00,000
Laundry	1,40,000
Interior	2,50,000
Miscellaneous Expenses	2,00,200
Depreciation on Building (Rs. 300 Lakhs × 80% × 5%)	12,00,000
Depreciation on Furniture & Equipment (Rs. 300 Lakhs × 20% × 15%)	9,00,000
Room attendant's wages (Rs. 15 per Room Day for 43,200 Room Days)	6,48,000
Lighting charges	1,32,800
Total cost	45,71,000
Add: Profit Margin (20% on Room rent or 25% on Cost)	11,42,750
Total Rent to be charged	57,13,750

Calculation of Room Rent per day:

Total Rent / Equivalent Full Room days = Rs. 57,13,750/ 36,000 = Rs.

158.72 Room Rent during Season – Rs. 158.72

Room Rent during Off season = Rs. 158.72 × 50% = Rs. 79.36

ANSWER 3(A)

(i) Cost Sheet of M/s Areeba Pvt. Ltd. for the year 2019.

Normal Capacity: 36,000 units p.a.

Particulars	3 Months 4,500 Units		9 Months 21,600 units	
	Amount (Rs.)	Cost per unit (Rs.)	Amount (Rs.)	Cost per unit (Rs.)
Direct material	1,80,000		8,64,000	
Less: Scrap	(22,500)		(1,08,000)	

Materials consumed	1,57,500	35	7,56,000	35
Direct Wages	1,44,000	32	6,48,000	30
Prime Cost	3,01,500	67	14,04,000	65
Factory overheads:				
- Fixed	90,000		2,70,000	
- Variable	45,000		2,16,000	
- Semi variable	27,000	36	1,51,200	29.50
Works Cost	4,63,500	103	20,41,200	94.50
Add: Administrative overheads	1,29,600	28.80	3,88,800	18
Cost of Production	5,93,100	131.80	24,30,000	112.5
Selling Overheads	36,000	8	1,72,800	8
Cost of Sales	6,29,100	139.80	26,02,800	120.5

Working Notes:

1. Calculation of Costs

Particulars	4,500 units	21,600 units
	Amount (Rs.)	Amount (Rs.)
Material	1,80,000 (Rs. 40 × 4,500 units)	8,64,000 (Rs. 40 × 21,600 units)
Wages	1,44,000 (Max. of Rs. 30 × 4,500 units = Rs. 1,35,000 and Rs. 48,000 × 3 months = Rs. 1,44,000)	6,48,000 (21600 Units×30)
Variable Cost	45,000 (Rs. 10 × 4,500 units)	2,16,000 (Rs. 10 × 21,600 units)
Semi-variable Cost	27,000 (Rs. 1,08,000 × 3 Months / 12 Months)	1,51,200 [(Rs. 1,08,000 × 9 Months / 12 Months)
		+46,800(for 20 % increase) +23,400(for 10% increase)
Selling Overhead	36,000 (Rs.8 × 4,500 units)	1,72,800(Rs. 8 × 21,600 units)

Notes:

- Alternatively scrap of raw material can also be reduced from Work cost.
- Administrative overhead may be treated alternatively as a part of general overhead. In that case, Works Cost as well as Cost of Production will be same i.e. Rs. 4,63,500 and Cost of Sales will remain same as Rs. 6,29,100.

(ii) Calculation of Selling price for nine months period

Particulars	Amount (Rs.)
Total Cost of sales Rs. (6,29,100+26,02,800)	32,31,900
Add: Desired profit	8,76,600
Total sales value	41,08,500
Less: Sales value realised in first three months (Rs. 145 × 4,500 units)	(6,52,500)
Sales Value to be realised in next nine months	34,56,000
No. of units to be sold in next nine months	21,600
Selling price per unit (Rs. 34,56,000 ÷ 21,600 units)	160

ANSWER 3(B)

(i)

Dr.		Process-1 Account				Cr.	
	Particulars	Units	Total (Rs.)		Particulars	Units	Total (Rs.)
To	Raw Material Consumed	10,000	7,50,000	By	Normal Loss A/c @ 13.5	500	6,750
"	Direct Wages	--	3,00,000	"	Process 2 @ 133.5	9,000	12,01,500
"	Direct Expenses	--	1,50,000	"	By Abnormal Loss @ 133.5	500	66,750
"	Manufacturing Overheads		75,000				
		10,000	12,75,000			10,000	12,75,000

Cost per unit of completed units and abnormal loss:

$$= \frac{\text{Rs. 12,75,000} - \text{Rs. 6,750}}{10,000 \text{ units} - 500 \text{ units}} = \text{Rs. 133.5}$$

(ii)

Dr.		Process-2 Account				Cr.	
	Particulars	Units	Total (Rs.)		Particulars	Units	Total (Rs.)
To	Process-I A/c	9,000	12,01,500	By	Normal Loss A/c @ 145	900	1,30,500
"	To Direct Wages	--	5,60,000	"	By Finished Stock A/c [bal fig]	8,200	21,04,667
"	Direct Expenses	--	3,64,000				
"	Manufacturing Overheads	--	84,000				
"	To Abnormal gain (Rs. 256.67 × 100 units)	100	25,667				
		9,100	22,35,167			9,100	22,35,167

Cost per unit of completed units and abnormal gain:

$$= \frac{\text{Rs. 22,09,500} - \text{Rs. 1,30,500}}{8,100 \text{ units}} = \text{Rs. 256.67}$$

Dr.		Finished Goods A/c				Cr.	
	Particulars	Units	Total (Rs.)		Particulars	Units	Total (Rs.)
To	Process II A/c	8,200	21,04,667	By	By Cost of Sales	8,000	20,53,333
				"	By Balance c/d	200	51,334
		8,200	21,04,667			8,200	21,04,667

(iii) Normal Loss A/c

Dr.				Cr.			
	Particulars	Units	Total (Rs.)		Particulars	Units	Total (Rs.)
To	Process I	500	6,750	By	By abnormal Gain II	100	14,500
	Process II	900	1,30,500		By Cash	500	6,750
					By Cash	800	1,16,000
		1400	1,37,250			1400	1,37,250

(iv) Abnormal Loss A/c

Dr.				Cr.			
	Particulars	Units	Total (Rs.)		Particulars	Units	Total (Rs.)
To	Process I	500	66,750	By	By Cost Ledger Control A/c	500	6,750
					By Costing P & L A/C (Abnormal Loss)		60,000
			66,750				66,750

(v) Abnormal Gain A/c

Dr.				Cr.			
	Particulars	Units	Total (Rs.)		Particulars	Units	Total (Rs.)
To	Normal Loss A/c @ 145	100	14,500	By	Process II	100	25,667
To	Costing P & L A/C		11,167				
		100	25,667			100	25,667

ANSWER4(A)**Contract Account (For the year ended 20X7)**

Particulars	(Rs.)	Particulars	(Rs.)
To Materials	6,75,000	By Plant at site c/d	2,25,000
“ Wages	6,20,000	By Work – in – Progress c/d :	
“ Transportation cost	30,000	Work Certified	13,50,000
“ Other expenses	30,000	Work uncertified	15,000
“ Plant	3,00,000	By Costing P & L A/c.	65,000
		(Loss for the year)	
	16,55,000		16,55,000

Contract Account (For the year ended 20X8)

Particulars	(Rs.)	Particulars	(Rs.)
To Plant at site b/d	2,25,000	By Plant at site c/d	1,68,750
To Work – in – progress b/d :		By Work – in – progress c/d :	

- Work certified	13,50,000		Work certified	45,00,000	
- Work uncertified	15,000	13,65,000	Work uncertified	75,000	45,75,000
To Materials		10,50,000			
To Wages		9,00,000			
To Transportation cost		90,000			
To Other expenses		75,000			
To costing P & L A/c. (Notional Profit for the year)		10,38,750			
		47,43,750			47,43,750

Contract Account (For the year ended 20X9)

Particulars	(Rs.)	Particulars	(Rs.)
To Plant at site b/d	1,68,750	By Plant at site c/d	1,26,563
To Work – in – progress b/d :		(75% of Rs. 1,68,750)	
Work certified	45,00,000	By Contractee A/c.	60,00,000
Work uncertified	75,000	By Costing P & L A/c.	3,66,187
To Materials	9,00,000	(Notional Loss for the year)	
To Wages	7,50,000		
To Transportation Cost	75,000		
To Other expenses	24,000		
	64,92,750		64,92,750

Note: WDV Depreciation

- i) For year Ended 20X7 = 3,00,000 – 2,25,000 = 75,000
- ii) For year Ended 20X8 = 2,25,000 – 1,68,750 = 56,250
- iii) For year Ended 20X9 = 1,68,750 – 1,26,563 = 42,187

ANSWER4(B)

(i) Overheads application base: Direct labour hours

	Equipment	Equipment
	A (Rs.)	B (Rs.)
Direct material cost	350	400
Direct labour cost	360	480
Overheads*	180	240
	890	1120

$$*Pre-determined rate = \frac{\text{Budgeted overheads}}{\text{Budgeted direct labour hours}} = \frac{Rs.15,00,000}{25,000 \text{ hours}} = Rs. 60$$

(ii) Estimation of Cost-Driver rate

Activity	Overhead cost	Cost-driver level	Cost driver rate
	(Rs.)		(Rs.)
Order processing	3,00,000	600 Orders processed	500
Machine processing	10,00,000	50,000 Machine hours	20
Inspection	2,00,000	15,000 Inspection hours	10
		Equipment	Equipment
		A (Rs.)	B (Rs.)
Direct material cost		350	400
Direct labour cost		360	480
Prime Cost(A)		710	880
Overhead Cost			
Order processing 400: 200		2,00,000	1,00,000
Machine processing 22,500: 27,500		4,50,000	5,50,000
Inspection 5,000: 15,000		50,000	1,50,000
Total overhead cost		7,00,000	8,00,000

(Overheads cost per unit for each overhead can also be calculated)

Per unit cost	A (Rs.)	B (Rs.)
7,00,000 /3,200 (B)-A	218.75	
8,00,000/ 3,850 (B)-B		207.79
Unit manufacturing cost (A+B)	928.75	1,087.79

(iii) Calculation of Cost Distortion

	Equipment	Equipment
	A (Rs.)	B (Rs.)
Unit manufacturing cost—using direct labour hours as an application base	890.00	1,120.00
Unit manufacturing cost-using activity based costing	928.75	1,087.79
Cost distortion	-38.75	32.21

ANSWER 5(A)

	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).

ANSWER 5(B)

Effective machine hour = 4,500 – 300 = 4,200 hours

Calculation of Comprehensive machine hour rate

Elements of Cost and Revenue	Amount (₹) Per Annum
Repair and Maintenance (₹5,40,000 ÷ 15 years)	36,000
Power (4,200 hours × 10 units × ₹7)	2,94,000
Depreciation $\left(\frac{₹29,14,800 - ₹1,50,000}{15 \text{ years}} \right)$	1,84,320
Insurance (₹29,14,800 × 2%)	58,296
Oil and Lubricant	87,384
Salary to Operator {(₹24,000×12)/3}	96,000
Total Cost	7,56,000
Effective machine hour	4,200
Total Machine Rate Per Hour	180

ANSWER 5(C)

(i) (a) Stores Ledger Account for the month of April, 2019 (Weighted Average Method)

Date	Receipt			Issue			Balance		
	Qty Units	Rate (₹)	Amount (₹)	Qty Units	Rate (₹)	Amount (₹)	Qty Units	Rate (₹)	Amount (₹)
1-4-19	–	–	–	–	–	–	1,000	15.00	15,000
4-4-19	3,000	16.00	48,000	–	–	–	4,000	15.75	63,000
8-4-19	–	–	–	1,000	15.75	15,750	3,000	15.75	47,250
15-4-19	1,500	18.00	27,000	–	–	–	4,500	16.50	74,250
20-4-19	–	–	–	1,200	16.50	19,800	3,300	16.50	54,450
25-4-19	–	–	–	300	18.00	5,400	3,000	16.35	49,050
26-4-19	–	–	–	1,000	16.35	16,350	2,000	16.35	32,700
28-4-19	500	17.00	8,500	–	–	–	2,500	16.48	41,200
30-4-19	–	–	–	50	16.48	824	2,450	16.48	40,376

(b) Stores Ledger Account for the month of April, 2019 (LIFO)

Date	Receipt			Issue			Balance		
	Qty Units	Rate (₹)	Amount (₹)	Qty Units	Rate (₹)	Amount (₹)	Qty Units	Rate (₹)	Amount (₹)
1-4-19	–	–	–	–	–	–	1,000	15	15,000
4-4-19	3,000	16	48,000	–	–	–	1,000	15	15,000
							3,000	16	48,000

8-4-19	-	-	-	1,000	16	16,000	1,000	15	15,000
							2,000	16	32,000
15-4-19	1,500	18	27,000	-	-	-	1,000	15	15,000
							2,000	16	32,000
							1,500	18	27,000
20-4-19	-	-	-	1,200	18	21,600	1,000	15	15,000
							2,000	16	32,000
							300	18	5,400
25-4-19	-	-	-	300	18	5,400	1,000	15	15,000
							2,000	16	32,000
26-4-19	-	-	-	1,000	16	16,000	1,000	15	15,000
							1,000	16	16,000
28-4-19	500	17	8,500	-	-	-	1,000	15	15,000
							1,000	16	16,000
							500	17	8,500
30-4-19	-	-	-	50	17	850	1,000	15	15,000
							1,000	16	16,000
							450	17	7,650

(ii) Value of Material Consumed and Closing Stock

	Weighted Average method (₹)	LIFO method (₹)
Opening stock as on 01-04-2019	15,000	15,000
Add: Purchases	83,500	83,500
	98,500	98,500
Less: Return to supplier	5,400	5,400
Less: Abnormal loss	824	850
Less: Closing Stock as on 30-04-2019	40,376	38,650
Value of Material Consumed	51,900	53,600

ANSWER 6(A)

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.

ANSWER 6(B)

Obsolescence: Obsolescence is defined as “the loss in the intrinsic value of an asset due to its supersession”.

Materials may become obsolete under any of the following **circumstances**:

- (i) where it is a spare part, or a component of a machinery used in manufacture and that machinery becomes obsolete;
- (ii) where it is used in the manufacture of a product which has become obsolete;
- (iii) where the material itself is replaced by another material due to either improved quality or fall in price.

Treatment: In all three cases, the value of the obsolete material held in stock is a total loss and immediate steps **should be taken to dispose it off** at the best available price. The loss arising out of obsolete materials on **abnormal loss does not form part of the cost** of manufacture.

ANSWER 6(C)**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
	<i>(Being issue of Direct and Indirect materials)</i>		
(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
	<i>(Being allocation of Direct and Indirect wages)</i>		
(iii)	Factory Overhead Control A/c	Dr. 60,000	
	To Costing Profit & Loss A/c		60,000
	<i>(Being transfer of over absorption of Factory overhead)</i>		
	Costing Profit & Loss A/c	Dr. 50,000	
	To Administration Overhead Control A/c		50,000
	<i>(Being transfer of under absorption of Administration overhead)</i>		
(iv)	Trade Payables A/c	Dr. 9,00,000	
	To Cash/ Bank A/c		9,00,000
	<i>(Being payment made to creditors)</i>		
		Dr. 8,00,000	8,00,000

ANSWER 6(D)

Treatment of by-product cost in Cost Accounting:

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

- (a) **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.
- (b) **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.
- (c) **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.

ANSWER 6(E)

Product costs are those costs that are identified with the goods purchased or produced for resale. In a manufacturing organisation they are attached to the product and that are included in the inventory valuation for finished goods, or for incomplete goods. Product cost is also known as inventoriable cost. Under absorption costing method it includes direct material, direct labour, direct expenses, directly attributable costs (variable and non-variable) and other production (manufacturing) overheads. Under marginal costing method Product Costs includes all variable production costs and the all fixed costs are deducted from the contribution.

Periods costs are the costs, which are not assigned to the products but are charged as expense against revenue of the period in which they are incurred. General Administration, marketing, sales and distributor overheads are recognized as period costs.