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TEST SERIES

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**SUGGESTED ANSWERS**

**CA INTER**

**Test Code – JK-COS-11**

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## Answers

### Q.1

#### (a)

#### Stores ledger for the month of January

Date	Receipts			Issues			Balance		
	Quantity	Rate	Amount	Quantity	Rate	Amount	Quantity	Rate	Amount
January									
1							10,000	2	20,000
5				1,000	2	2,000	9,000	2	18,000
6				2,000	2	4,000	7,000	2	14,000
10				500	2	1,000	6,500	2	13,000
15				2,000	2	4,000	4,500	2	9,000
20				3,000	2	6,000	1,500	2	3,000
25				1,000	2	2,000	500	2	1,000
31	5,000	2	10,000				500	2	1,000
							5,000	2	10,000

**Total Value of Closing Stock:** 5,500 Units, ₹ 11,000

#### Marking System:

1 mark each for transactions on 10th, 20th and 25th, 1/2 marks each for transactions on 5th, 6th, 15th and 31st.

#### (b)

Total Labour Cost			27,000
<b>Less: Time Rate Wages</b>			
Helper	100 Hours X 20 per hour	2,000	
Labourer	200 Hours X 20 per hour	4,000	
Welders	300 Hours X 20 per hour X 2 Welders	12,000	[18,000]
<b>Piece Rate Premium</b>			<b>9,000</b>

When we distribute Piece Rate Premium in the ratio of Time Rate Wages [9,000 in 2,000 : 4,000 : 12,000], piece rate premium of helper will be ₹ 1,000, of labourer will be ₹ 2,000 and of welders it will be ₹ 6,000.

#### Calculation of Total Wages for each category of worker

Particulars	Helper	Labour	Welders
Time Rate Wages	2,000	4,000	12,000
Piece Rate Premium	1,000	2,000	6,000
<b>Total Wages</b>	<b>3,000</b>	<b>6,000</b>	<b>18,000</b>

#### Marking System:

3 Marks for Piece Rate Premium

2 Marks for distribution of piece rate premium



(d)

**Reconciliation Note**

No.	Reasons	Cost	Financial	Difference
[1]	[2]	[3]	[4]	[5]=[3]-[4]
1	Opening Stock	MORE	LESS	+ 30,000 A
2	Closing Stock	MORE	LESS	+ 15,000 L
3	Preliminary Expenses	---	36,000	- 36,000 L
4	Factory Overheads	LESS	MORE	-19,000 L
5	Administration Overheads	LESS	MORE	- 45,500 L
6	Interest earned (Cr)	---	7,500	- 7,500 A
7	Rent received (Cr)	---	54,000	- 54,000 A
8	Selling Overheads	MORE	LESS	+ 39,000 A
9	Bad Debts	---	18,000	- 18,000 L
10	Stock Adjustment (Cr)	---	5,000	- 5,000 A

**Reconciliation Statement**

Particulars	Amt.	Amt.
Profit as per Cost A/C		2,91,000
<b>Add:</b>		
1. Opening Stock overvalued in Cost A/C	30,000	
2. Interest earned not recorded in Cost A/C	7,500	
3. Rent received not recorded in Cost A/C	54,000	
4. Selling Overheads Over absorbed in Cost A/C	39,000	
5. Stock Adjustment not recorded in Cost A/c	5,000	1,35,500
		4,26,500
<b>Less:</b>		
1. Closing Stock of Finished Goods overvalued in Cost A/C	15,000	
2. Preliminary Expenses not recorded in Cost A/C	36,000	
3. Factory Overheads Under absorbed in Cost A/C	19,000	
4. Administration Overheads Under absorbed in Cost A/C	45,500	
5. Bad Debts not recorded in Cost A/C	18,000	[1,33,500]
<b>Profit as per Financial A/C</b>		<b>2,93,000</b>

**Marking System:**

1/2 mark for each adjustment

## Q.2

(a)

## Cost Sheet of X Limited

Particulars	Produced	???	Units	Total Cost		C.P.U.
	Sold	???	Units	₹	₹	₹
<b><u>Raw Materials Consumed</u></b>						
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	?
<b><u>Add: Factory Overheads [Indirect Manufacturing Overheads]</u></b>					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	?
<b><u>Add: Administration Overheads [Related to Production]</u></b>					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	?
<b><u>Add: Marketing Overheads [Selling and Distribution Overheads]</u></b>					NIL	?
Cost of Sales					52,50,000	?
Profit [75,00,000 - 52,50,000]					22,50,000	?
<b>Sales</b>					<b>75,00,000</b>	?

**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**

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

$$x = 6,78,917$$

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)**

**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	95,12,000	Work Uncertified            3,20,000	3,03,20,000
To Material at site (Opening Stock)	80,000	By <u>Materials returned to</u>	
To Materials purchased	40,00,000	Stores	2,50,000
To Materials issued from stores	15,00,000	Suppliers	1,50,000
To Wages	59,80,000	By Material at site (Cl. Stock)	2,00,000
To Supervisor's fees	5,10,000	By Material sold	10,000
To Plant hire charges	5,00,000		
To Other Expenses	1,00,000		
To share of general overheads for this contract	1,80,000		
[18,00,000 X 1/10]			
To Fines	1,20,000		
To Depreciation	75,000		
To Profit & Loss A/C [Notional Profit]	83,73,000*		
	<b>3,09,30,000</b>		<b>3,09,30,000</b>

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
	<b>2,40,00,000</b>		<b>2,40,00,000</b>

**W.N. 1: Wages**

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

**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	25,000
		<u>75,000</u>

**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 Wages Depreciation
- 1 Mark for share of general overheads calculation



**Q.3**

(a)

No.	Particulars	Anil	Bajaj
A.	Time Allowed [Hours]	62.50	55
B.	Time Taken [Hours]	54	48
C.	Time Saved [Hours] [A - B]	8.50	7
D.	Rate Per Hour [Rupees/Hour]	50	80
E.	Basic Wages [Rupees] [ B X D]	2,700	3,840
F.	Normal Hours	42	42
G.	Overtime Hours [B - F]	12	6
H.	Overtime Wages [Rupees]	225	120
I.	Bonus Wages [Rupees]	85	112
J.	Total Wages [E + H + I]	3,010	4,072
H.	Direct Wages cost per dozen [Rupees]	32.88	18.84

Particulars	Anil	Bajaj
Bonus earned	85	112
Gross Wages	3,010	4,072
Direct Wages Cost Per dozen	32.88	18.84

**W.N. 1:**

**Time Allowed [Hours]**

Anil		Bajaj		
Minutes	Units	Minutes	Units	
30	12	150	144	55.00
???	1,500	???	3,168	Hours

**W.N. 2:**

**Overtime Wages [Rupees]**

Anil	Overtime Rate	
First 6 hours	50 x 1/4	12.50/Hour
For next 6 hours	50 x 1/2	25.00/Hour

**Overtime Wages**

6 Hours X 12.50/Hour	75
6 Hours X 25.00/Hour	150
	<u>225</u>

<b>Bajaj</b>	<b>Overtime Rate</b>		
	First 6 hours	80 x 1/4	20.00/Hour
	<b>Overtime Wages</b>		
	6 Hours X 20.00/Hour	120	

**W.N. 2****Bonus Wages [Rupees]**

Anil	8.50 Hours X 50/Hour X 1/5	85
Bajaj	7 Hours X 80/Hour X 1/5	112

**W.N. 3****Direct Wages cost per dozen**

No.	Particulars	Anil	Bajaj
A.	Work allotted [in Units]	1,500	3,168
B.	Work rejected [in Units]	400	568
C.	Actual Output [in Units] [A - B]	1,100	2,600

**Anil**  $\frac{3,010}{1,100}$  2.74 per unit

2.74 per unit x 12 Units = ₹ 32.88

**Bajaj**  $\frac{4,072}{2,600}$  2.74 per unit

1.57 per unit x 12 Units = ₹ 18.84

**Marking System:**

- 1 Mark for Overtime Hours calculation
- 2 Marks for Overtime Wages Calculation
- 2 Marks for Bonus Amount Calculation
- 2 Marks for Gross Wages Calculation
- 3 Marks for Direct Wages cost per dozen [as it includes overtime treatment]

(b)

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			
	<b>16,000</b>	<b>24,192</b>		<b>16,000</b>	<b>24,192</b>

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*
	<b>720</b>	<b>1,152</b>		<b>720</b>	<b>1,152</b>

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			
	<b>14,720</b>	<b>2,208</b>		<b>14,720</b>	<b>2,208</b>

**Working Note 1: Valuation of Abnormal Loss**

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

$$\text{Cost Per Unit} = \frac{24,192 - 640}{16,000 - 1,280}$$

$$= \frac{23,552}{14,720}$$

$$= ₹ 1.60 \text{ per kg}$$

$$720 \text{ kgs X } 1.60 \text{ per kg} = ₹ 1,152$$

**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

**Q.4****(a)****Calculation of Absorption Rate and its interpretation**

No.	Method	Formula	Absorption Rate	Interpretation
1	Machine Hour	$\frac{\text{Budgeted Fixed Overheads}}{\text{Budgeted Machine Hours}}$	$\frac{15,00,000}{30,000}$ <b>50/Mach.Hr</b>	Fixed Overheads will be absorbed at the rate of ₹ 50 per Machine Hour.
2	Labour Hour	$\frac{\text{Budgeted Fixed Overheads}}{\text{Budgeted Labour Hours}}$	$\frac{15,00,000}{15,000}$ <b>100/Lab.Hr</b>	Fixed Overheads will be absorbed at the rate of ₹ 100 per Labour Hour.
3	Labour Cost	$\frac{\text{Budgeted Fixed Overheads}}{\text{Budgeted Labour Cost}} \times 100$	$\frac{15,00,000}{30,00,000} \times 100$ <b>50% of Labour Cost</b>	Fixed Overheads will be absorbed at the rate of 50% of Labour Cost
4	Material Cost	$\frac{\text{Budgeted Fixed Overheads}}{\text{Budgeted Material Cost}} \times 100$	$\frac{15,00,000}{7,50,000} \times 100$ <b>200% of Material Cost</b>	Fixed Overheads will be absorbed at the rate of 200% of Material Cost.
5	Prime Cost	$\frac{\text{Budgeted Fixed Overheads}}{\text{Budgeted Prime Cost}} \times 100$	$\frac{15,00,000}{37,50,000} \times 100$ <b>40% of Prime Cost</b>	Fixed Overheads will be absorbed at the rate of 40% of Prime Cost.

**W.N. 1****Total Budgeted Fixed Overheads**

Fixed Factory Overheads	10,00,000
Fixed Administration Overheads [related to production]	<u>5,00,000</u>
	<b>15,00,000</b>

**W.N. 2****Prime Cost**

Material Cost [in ₹]	7,50,000
Labour Cost [in ₹]	<u>30,00,000</u>
	<b>37,50,000</b>

No.	Method	Suitability
1	Output	When company is producing only one product OR Multiple but similar products.
2	Machine Hour	When Production Process is machine oriented.
3	Labour Hour	When Production Process is Labour oriented and overheads depend upon Labour Time.
4	Labour Cost	When Production Process is Labour oriented and overheads depend upon Labour Type.
5	Material Cost	When Overheads depend upon Material Consumed.
6	Prime Cost	When overheads depend upon Material Consumed and Wages Paid.

**Marking System:**

1/2 Mark each for calculation of absorption rate.

1/2 mark each for interpretation.

Overall 5 marks for suitability.

(b)

**Statement showing total cost and gross fees for the period of 1 year**

Rent of Office	[35,000 x 12]	4,20,000
Salary of Article clerk	[5,000 x 12 x 3]	1,80,000
Salary of other office staff	[10,000 x 12 x 5]	6,00,000
Salary of peons	[2,500 x 12 x 2]	60,000
Electricity charges	[10,000 x 12]	1,20,000
Repairs and Maintenance		50,000
Conveyance paid to staff and articles	[5,000 x 12]	60,000
Communication cost	[3,500 x 12]	42,000
Insurance		36,000
Refreshment Expenses	[2,500 x 12]	30,000
<b><u>Depreciation</u></b>		
Air Conditioner		8,500
Car		1,00,000
Diesel Cost		1,25,000
General Expenses		1,68,500
Total Cost	80	<u>20,00,000</u>
Profit [25,00,000 - 20,00,000]	20	5,00,000
Gross Fees	100	<u><b>25,00,000</b></u>

Let the fees to be charged per return for class A assesses be x.

Thus, the fees to be charged per return for class B assesses be 2x.

Thus, the fees to be charged per return for class C assesses be 3x.

**Gross Fees**

Class A 40,000 Returns X x per return	40,000x
Class B 30,000 Returns X 2x per return	60,000x
Class C 50,000 Returns X 3x per return	<u>1,50,000x</u>
	2,50,000x

However, Gross Fees = 25,00,000

Thus,

$$2,50,000x = 25,00,000$$

$$x = \frac{25,00,000}{2,50,000} = 10$$

Fees to be charged from class A assesses per return = x = ₹ 10

Fees to be charged from class B assesses per return = 2x = 2 X 10 = ₹ 20

Fees to be charged from class C assesses per return = 3x = 3 X 10 = ₹ 30

**W.N. 1**

**Diesel Cost**

18,000	90	20,000 kms
???	100	
Litre	KM	
1	8	2,500 litres
???	20,000	

**2,500 litres X 50 per litre = 1,25,000**

**W.N. 2**

**Depreciation**

Air Conditioner

Total Cost [25,000 per A.C. X 2 A.C.s] 50,000 + 35,000 = 85,000

85,000 X 10% p.a. = 8,500 p.a.

Car

$\frac{11,00,000 - 1,00,000}{10 \text{ Years}} = 1,00,000 \text{ p.a.}$

**Marking System**

5 Marks for the cost statement

5 marks for the Fees calculation

**Q.5**

**(a)**

**Ordering Cost per order**

Carriage	₹ 3,000/Order
Communication Cost	₹ 2,000/Order
Loading/Unloading charges	₹ 5,000/Order
	<hr/>
	<b>₹ 10,000/Order</b>

**Carrying Cost per Unit Per Annum**

Warehouse Cost	₹ 5.00 per unit per annum
Insurance Cost	₹ 15.00 per unit per annum
Cost of Working Capital Finance [200 Per Unit X 10% per annum]	₹ 20.00 per unit per annum
	<hr/>
	<b>₹ 40.00 per unit per annum</b>

**Annual requirement of Raw Materials**

Finished Goods [Units]

1  
25,000

Raw Materials [Kgs]

2  
?**50,000 kgs per annum**

$$E.O.Q. = \sqrt{\frac{2ACa}{C_i}}$$

$$E.O.Q. = \sqrt{\frac{2 \times 50,000 \times 10,000}{40}}$$

$$E.O.Q. = 5,000 \text{ Kgs}$$

$$T.A.C. = TCa + TCi + P.C.$$

$$T.A.C. = \frac{A}{Q} \times Ca + \frac{Q}{2} \times Ci + A \times C.P.U.$$

$$T.A.C. = \frac{50,000}{5,000} \times 10,000 + \frac{5,000}{2} \times 40 + 50,000 \times 200$$

$$T.A.C. = 1,00,000 + 1,00,000 + 1,00,00,000$$

$$T.A.C. = ₹ 1,02,00,000$$

T.A.C. = Total Inventory Associated Cost including purchase cost

**Marking System:**

1 Mark for Ordering Cost Calculation

1 Mark for Carrying Cost Calculation

1 Mark for Total Cost calculation

1 Mark for Annual Quantity Calculation

1 Mark for E.O.Q.



(b)

**Given Standard**

**Output - 1 Unit**

Hours	Rate	Amt. ₹
5	5.00	25

**Calculation of Revised Standard**

Units	Hours	
1	5	50,000
10,000	???	Hours

**Revised Standard**

**Output - 10,000 Units**

Hours	Rate	Amt
50,000	5.00	2,50,000

**Actuals**

**Output - 10,000 Units**

Hours	Rate	Amt
60,000	6	3,60,000

**Working Note 1:**

Calculation of actual rate per hour

$$3,60,000 / 60,000 = ₹ 6 \text{ per hour}$$

1. **Total Variable Overheads Cost Variance**

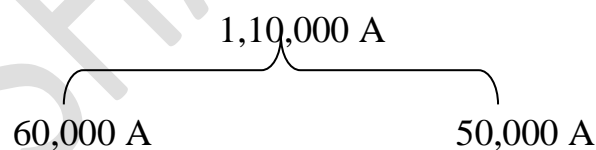
$$2,50,000 - 3,60,000 = 1,10,000 \text{ A}$$

2. **Variable Overheads Expenditure Variance**

$$[5-6] \times 60,000 = 60,000 \text{ A}$$

3. **Variable Overheads Expenditure Variance**

$$[50,000 - 60,000] \times 5 = 50,000 \text{ A}$$



**Marking System:**

2 marks for showing the workings

1 mark each for each of the three variances.

(c)

(i)

S.P.P.U. - V.C.P.U. = Contribution Per Unit

$$20.00 - 15.00 = 5.00$$

$$\text{B.E.P. in Volume} = \frac{6,30,000}{5.00} = 1,26,000 \text{ Units}$$

$$\text{B.E.P. in Value} = 1,26,000 \text{ Units} \times ₹ 20 \text{ per unit} = ₹ 25,20,000$$

(ii)

Profit required = 10% on sales

Let x units be required to be sold to earn net profit of 10% on sales.

$$\text{Total Sales Value at x units} = x \text{ units} \times 20 \text{ per unit} \quad 20x$$

$$\text{Total Variable Cost at x units} = x \text{ units} \times 15 \text{ per unit} \quad 15x$$

$$\text{Profit to be earned at x units} = 10\% \text{ of sales} = 10\% \text{ of } 20x \quad 2x$$

Contribution = Fixed Cost + Net Profit

$$5x = 6,30,000 + 2x$$

$$5x - 2x = 6,30,000$$

$$3x = 6,30,000$$

$$x = \frac{6,30,000}{3} = 2,10,000 \text{ units}$$

$$\text{Sales in Value} = 2,10,000 \text{ units} \times ₹ 20 \text{ per units} = ₹ 42,00,000$$

<p><b>Sales</b> 42,00,000</p>	<p><b>- Variable Cost</b> - 31,50,000 [2,10,000 X 15]</p>	<p><b>= Contribution</b> = 10,50,000</p>
	<p>Fixed Cost 6,30,000 [Given]</p>	<p>Net Profit 4,20,000 [10,50,000 - 6,30,000]</p>

Check

$$= \frac{4,20,000}{42,00,000} \times 100$$

$$= 10\%$$

Sales required to earn net profit of 10% on Sales = ₹ 42,00,000

(iii)

Profit required		60,000
Break Even Point		6,30,000
Contribution required		6,90,000
Total Sales	1,38,000 units X 20 p.u.	27,60,000
Break Even Point	1,26,000 units X 20 p.u.	<u>[25,20,000]</u>
Margin of Safety		2,40,000

**Units      Contribution Per Unit**

1	5
?	6,90,000

**Total Sales = 1,38,000 Units**

Sales which will give contribution of ₹ 6,90,000 will give profit of ₹ 60,000

(iv)

New Break Even Point in Value = 1,20,000 units

In case of Break Even Point

Contribution = Fixed Cost

Here, Fixed Cost = ₹ 6,30,000, hence we have to earn contribution of ₹ 6,30,000 by selling 1,20,000 units.

**Contribution per unit**

$$\frac{\text{Contribution}}{\text{Number of Units}} = \frac{6,30,000}{1,20,000} = ₹ 5.25 \text{ p.u.}$$

Variable Cost Per Unit	15.00
Contribution Per Unit	<u>5.25</u>
Selling Price Per Unit	20.25

**Marking System:**

1 mark for required part i.

3 marks each for all other required parts

**Q.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 should 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 should 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)

**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.

**Marking System:**

Overall 5 Marks

(d)

These contracts provide for the payment by the contractee of the actual cost of manufacture plus a stipulated profit, mutually decided between the two parties. The main features of these contracts are as follows:

1. The practice of cost-plus contracts is adopted in the case of those contracts where the probable cost of the contracts cannot be ascertained in advance with a reasonable accuracy.
2. These contracts are preferred when the cost of material and labour is not steady and the contract completion may take number of years.
3. The different costs to be included in the execution of the contract are mutually agreed, so that no dispute may arise in future in this respect. Under such type of contracts, contractee is allowed to check or scrutinize the concerned books, documents and accounts.
4. Such a contract offers a fair price to the contractee and also a reasonable profit to the contractor.
5. The contract price here is ascertained by adding a fixed and mutually pre-decided component of profit to the total cost of the work.

**Marking System:**

1 Mark per each point

(e)

**Fixed cost** – These are costs, which do not change in total despite changes of a cost driver. A fixed cost is fixed only in relation to a given relevant range of the cost driver and a given time span. Rent, insurance, depreciation of factory building and equipment are examples of fixed costs where the final product produced is the cost object.

**Variable costs** – These are costs which change in total in proportion to changes of cost driver. Direct material, direct labour are examples of variable costs, in cases where the final product produced is the cost object.

**Marking System:**

2.5 Marks each