(GI-1, GI-2+4, GI-3, GI-5+6 & VDI-1, VI-1, SI-1)

DATE: 19.09.2020 **MAXIMUM MARKS: 100** **TIMING: 3¼ Hours**

PAPER 3 : COST ACCOUNTING

Answer to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate who has not opted for Hindi Medium. His/her answer in Hindi will not be valued.

Question No. 1 is compulsory.

Candidates are also required to answer any Four questions from the remaining Five Questions.

In case, any candidate answers extra question(s)/sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Wherever necessary, suitable assumptions may be made and disclosed by way of note.

Answer 1:

(a) (i) Efficiency Ratio $= \frac{\text{Actual Prodcution in terms of standard hours}}{\text{Actual hours worked}} \times 100$ } **1 M**

$= \frac{750 \text{ units} \times 10 \text{ hours}}{6,000} \times 100 = 125\%$ } **½ M**

(ii) Activity ratio $= \frac{\text{Actual Production in terms of standard hours}}{\text{Budgeted production in terms of standard hours}} \times 100$ } **1 M**

$= \frac{7,500}{880 \times 10} \times 100 = 85.23\%$ } **½ M**

(iii) Capacity Ratio $= \frac{\text{Actual hours worked}}{\text{Maximum hours in a budget period}} \times 100$ } **1 M**

$= \frac{6,000}{8,800} \times 100 = 68.19\%$ } **½ M**

Activity ratio = Efficiency Ratio × Capacity Ratio
Or, 85.23 = 125% × 68.19 } **½ M**

Answer:

(b) Working Notes:

1. Depreciation per annum $= \frac{\text{Purchase price} - \text{Scrap value}}{\text{Estimated life}}$

$= \frac{\text{Rs. } 4,00,000 - \text{Rs. } 10,000}{5 \text{ years}} = \text{Rs. } 78,000$ } **½ M**

2. Total distance travelled by mini-bus in 25 days:
   = Length of the route (two -sides) × No. of trips per day × No. of days
   = 60 km × 6 trips × 25 days = 9,000 km } **½ M**

3. Total Passenger-Km:
   =Total distance travelled by mini-bus in 25 days × No. of seats
   = 9,000 km × 20 seats = 1,80,000 passenger-km } **½ M**

Statement suggesting fare per passenger-km

Particulars	Cost per annum Rs.	Cost per month Rs.
Fixed expenses:		
Insurance	15,000	
Garage rent	9,000	
Road tax	3,000	
Administrative charges	5,000	
Depreciation	78,000	
Interest on loan	10,000	10,000
	1,20,000	
Running expenses:		
Repair and maintenance	15,000	1,250
Replacement of tyre-tube	3,600	300
Diesel and oil cost (9,000 km × Rs. 5)	-	45,000
Driver and conductor's salary	-	5,000
Total cost (per month)		61,550.00
Add: Profit 20% of total revenue cost or 25% of total cost		15,387.50
Total revenue		76,937.50

2 M

Rate per passenger-km Rs. 76,937.50/1,80,000 passenger km = 0.42743 i.e., = 0.43 i.e., 43 paise **1½ M**

Answer:

(c) (1) Comparative Profitability Statements

Particulars	Process- A (Rs.)	Process- B (Rs.)
Selling Price per unit	20.00	20.00
Less: Variable Cost per unit	12.00	14.00
Contribution per unit	8.00	6.00
Total Contribution	32,00,000 (Rs. 8 ×4,00,000)	24,00,000 (Rs. 6 ×4,00,000)
Less: Total fixed costs	30,00,000	21,00,000
Profit	2,00,000	3,00,000
*Capacity (units)	4,30,000	5,00,000
Total Contribution at full capacity	34,40,000 (Rs. 8 ×4,30,000)	30,00,000 (Rs. 6 ×5,00,000)
Fixed Cost	30,00,000	21,00,000
Profit	4,40,000	9,00,000

3 M

Process- B should be chosen as it gives more profit as compared to Process-A.

(2)

Particulars	Process- A (Rs.)	Process- B (Rs.)
*Capacity (units)	6,00,000	5,00,000
Total contribution	48,00,000 (Rs. 8 ×6,00,000)	30,00,000 (Rs. 6 ×5,00,000)
Fixed Cost	30,00,000	21,00,000
Profit	18,00,000	9,00,000

2 M

If the capacity of the Process A and B is 6,00,000 units and 5,00,000 units respectively then Process-A is giving double profit than Process C. Thus Process A be chosen.

*Note: It is assumed that capacity produced equals sales

Answer:

(d) Statement of cost per batch and per order

No. of batch = 600 units ÷ 50 units = 12 batches

	Particulars	Cost per batch (Rs.)	Total Cost (Rs.)
	Direct Material Cost	5,000.00	60,000
	Direct Wages	500.00	6,000
	Oven set-up cost	750.00	9,000
	Add: Production Overheads (20% of Direct wages)	100.00	1,200
	Total Production cost	6,350.00	76,200
	Add: S&D and Administration overheads (10% of Total production cost)	635.00	7,620
	Total Cost	6,985.00	83,820
	Add: Profit (1/3rd of total cost)	2,328.33	27,940
(i)	**Sales price**	**{1 M} 9,313.33**	**1,11,760**
	No. of units in batch	50 units	
(ii)	**Cost per unit** (Rs. 6,985 ÷ 50 units)	**139.70**	
	Selling price per unit (9,313.33 ÷ 50 units)	**{1 M} 186.27**	

{1 M}

(iii) If the order is for 605 cakes, then selling price per cake would be as below:

Particulars	Total Cost (Rs.)
Direct Material Cost	60,500
Direct Wages	6,050
Oven set-up cost	9,750
Add: Production Overheads (20% of Direct wages)	1,210
Total Production cost	77,510

2 M

Add: S&D and Administration overheads (10% of Total production cost)	7,751
Total Cost	85,261
Add: Profit (1/3rd of total cost)	28,420
Sales price	**1,13,681**
No. of units	605 units
Selling price per unit (Rs.1,13,681 ÷ 605 units)	**187.90**

Answer 2:

(a) Calculation of cost and amount chargeable by the Contractor

Particulars	**Veg.**	**Non-Veg**
No of Meals per Day	180	120
No of Meals per Month	180×25 = 4,500	120×25 = 3,000
Variable Cost:	Rs.	Rs.
Cereals	8 per plate	-
Veg items	5 per plate	-
Cooking Oil	4 per plate	-
Spices	1 per plate	-
Total Variable Cost	18 × 7500 (4500 + 3000)	1,35,000
Additional variable cost of Non-veg meal	15 × 3000	45,000
Total Variable Cost		1,80,000
Fixed Cost:		
Salary of Cook	13,000	
Salary of Helpers (7,000 × 3)	21,000	
Fuel	2,000	36,000
Total Cost		2,16,000
Profit 20% on his takings or 25% on Cost		54,000
Total amounts chargeable by the Contractor		2,70,000

5 M

(i) No. of Non-Veg Meals 3,000

Equivalent No. of Veg Meals = 3,000 × 1.5 = 4,500

No. of Non Veg Meals = 4,500

Total 9,000

Price per Veg Meal = $\frac{Rs.2,70,000}{Rs.9,000}$ = Rs. 30

Price per Non Veg. Meal = Rs. 30 × 1.5 = Rs. 45/-

$2^{1/2}$ M

(ii) Price per meal when a worker will have to pay

Veg meal Rs. 30 – Subsidy (60% of Rs. 30)

= Rs. 30 – Rs. 27 = Rs. 12/-

Non-Veg Meal Rs. 45 – Subsidy (60% of Rs. 45)

Rs. 45 – Rs. 27 = Rs. 18/-

$2^{1/2}$ M

Note: Cost of Veg and non-veg meal calculated separately and then profit of 20% on overall takings and 25% profit on overall Cost is added to determine the total price to be charged.

Answer:

(b) **Step 1 :** Let X be the cost of material and Y be the normal rate of wages per hour.

Step 2 : Factory Cost of Workman 'A'

	(Rs.)
A. Material Cost	X
B. Wages	30 Y
C. Bonus = $\frac{30}{50} \times (50 - 30) \times Y$	12 Y
D. Overheads (30 Rs.5)	150
E. Factory Cost	3,490
Or, X + 42 Y = Rs. 3,490 (Given) – Rs. 150 = Rs. 3,340 …….. equation (i)	

3 M

Step 3 : Factory Cost of Workman 'B'

	(Rs.)
A. Material Cost	X
B.Wages	40 Y
C. Bonus = 50% of (SH - AH) × R	5 Y
= 50% of (50 - 40) ×R	
D. Overheads (40 × Rs.5)	200
E. Factory Cost	3,600
Or, X + 45 Y = Rs. 3,600 (Given) – Rs. 200=Rs. 3,400… ..... equation(ii)	

3 M

Step 4 : Subtracting equation (i) from equation (ii) 3Y = Rs. 60

Y = Rs. 60/3 = Rs. 20 per hour.

(a) The normal rate of wages: Rs. 20 per hour

(b) The cost of material: X + 45 × Rs. 20 =Rs. 3,400 or,

X = Rs. 3,400 – Rs. 900 = Rs. 2,500

2 M

(c) Comparative Statement of the Factory Cost of the product made by the two workmen.

	'A'(Rs.**)**	**'B'(**Rs.**)**
Material cost	2,500	2,500
Direct Wages	600 (30 ×Rs.20)	800 (40 × Rs. 20)
Bonus	240 (12 × Rs.20)	100 (5 × Rs.20)
Factory Overhead	150	200
Factory Cost	3,490	3,600

2 M

Answer: 3

(a) **Workings:**

Monthly Production of X = 30,000 kgs.

Raw Material Required = $\frac{30,000}{3} \times 5$= 50,000 kgs.

Material A = $\frac{50,000}{5} \times 3 = 30,000$ kg.

Material B = $\frac{50,000}{5} \times 2 = 20,000$ kg.

(i) Calculation of Economic Order Quantity (EOQ):

Material A $= \sqrt{\frac{2 \times \text{Annual consumption} \times \text{Order cost}}{\text{Carrying cost per unit p.a.}}}$ **1 M**

$= \sqrt{\frac{2 \times 30,000\text{kg.} \times 12\text{months} \times \text{Rs.}120}{15\% \text{ of Rs.}15}}$

$= \sqrt{\frac{8,64,00,000}{2.25}} = 6,196.77$ kg. or 6,197 kg. **1 M**

Material B $= \sqrt{\frac{2 \times 20,000 \text{ kg.} \times 12 \text{ months} \times \text{Rs.}120}{5\% \text{ of Rs.}22.44 *}}$

$= \sqrt{\frac{5,76,00,000}{1.122}} = 7,164.97$ or 7,165 kg. **1 M**

*Purchase price + 2% CST = Rs. 22 + 2% of Rs. 22 = Rs. 22.44

(ii) Calculation of Maximum Stock level: Since, the Material A is perishable in nature and it required to be used within 5 days, hence, the Maximum Stock Level shall be lower of two:

(a) Stock equal to 5 days consumption

$= \frac{30,000\text{kg.}}{25\text{days}} \times 5$ days = 6,000 kg.

(b) Maximum Stock Level for Material A:

Re-order Quantity + Re-order level – (Min consumption* × Min. lead time) **1 M**

Where, Re-order Quantity = 8,000 kg.

Re-order level = Max. Consumption* × Max. Lead time

= 30,000/25 × 2 days = 2,400 kg.

Maximum stock Level = 8,000 kg. + 2,400 kg. - (30,000/25 × 1 day)

= 10,400 – 1,200 = 9,200 kg.

Stock required for 5 days consumption is lower than the maximum stock level calculated through the formula. Therefore, Maximum Stock Level will be 6,000 kg. **1 M**

(*Since, production is processed evenly throughout the month hence material consumption will also be even.)

(iii) Calculation of Savings/ loss in Material A if purchase quantity equals to EOQ.

	Purchase Quantity = 8,000 kg.	**Purchase Quantity = EOQ i.e. 6,197 kg.**
Annual consumption	3,60,000 kg. (30,000 × 12 months)	3,60,000 kg. (30,000 × 12 months)
No. of orders [Note- (i)]	60 (3,60,000 ÷ 6,000)	60 (3,60,000 ÷ 6,000)
Ordering Cost (a)	Rs. 7,200 (Rs. 120 × 60)	Rs. 7,200 (Rs. 120 × 60)
Carrying Cost (b) [Note- (ii)]	Rs. 8,100 (15% of Rs.13.50 × 4,000)	Rs. 6,972 (15% of Rs.15 × 3,098.5)
Purchase Cost (c) (for good portion)	Rs. 48,60,000 (Rs. 13.50 × 3,60,000)	Rs. 54,00,000 (Rs. 15 × 3,60,000)
Loss due to obsolescence (d) [Note- (iii)]	Rs. 16,20,000 [Rs. 13.5 × (60 × 2,000)]	Rs. 1,77,300 [Rs. 15 × (60 × 197)]
Total Cost [(a) + (b) + (c) + (d)]	Rs. 64,95,300	Rs. 55,91,472

2 M **2 M**

If purchase quantity equals to EOQ, there will be a saving of Rs. 9,03,828 i.e. Rs. 64,95,300 - Rs. 55,91,472.

Notes: (i) As after 5 days of purchase the Material A gets obsolete, the quantity in excess of 5 days consumption i.e. 6,000 kg. are wasted. Hence,after 6,000 kg.a fresh order needs to be given.
(ii) Carrying cost is incurred on average stock of Materials purchased.
(iii) the excess quantity of material gets obsolete and loss has to be incurred.

1 M

Answer:

(b) (i) Calculation of Absolute Ton-km for the next month:]

Journey	**Distance in km**	**Weight - Up(in MT)**	**Ton-km**	**Weight-Down (in MT)**	**Ton-km**	**Total**
	(a)	**(b)**	**(c) = (a)×(b)**	**(d)**	**(e)= (a)×(d)**	**(c)+(e)**
Delhi to Kochi	2,700	14	37,800	6	16,200	54,000
Delhi to Guwahati	1,890	12	22,680	0	0	22,680
Delhi to Vijayawada	1,840	15	27,600	0	0	27,600
Delhi to Varanasi	815	10	8,150	0	0	8,150
Delhi to Asansol	1,280	12	15,360	4	5,120	20,480
Delhi to Chennai	2,185	10	21,850	8	17,480	39,330
Total	10,710	73	1,33,440	18	38,800	1,72,240

5 M

Total Ton-Km = 1,72,240 ton-km

(ii) Calculation of cost per ton-km:

Particulars	Amount (Rs.)	Amount (Rs.)
A. Running cost:		
- Diesel Cost {Rs.13.75 × (10,710 × 2)}	2,94,525.00	
- Engine Oil Cost $\left(\frac{Rs.4,200}{13,000\,km} \times 21,420\,km\right)$	6,920.31	
- Cost of loading of goods {Rs.150 × (73+18)}	13,650.00	
- Depreciation $\left(\frac{Rs.20,00,000}{7,20,000\,km} \times 21,420\,km\right)$	59,500.00	3,74,595.31
B. Repairs & Maintenance Cost $\left(\frac{Rs.12,000}{10,000\,km} \times 21,420\,km\right)$		25,704
C. Standing Charges		
- Drivers' salary (Rs.18,000 × 4 trucks)	72,000	
- Cleaners' salary (Rs.7,500 × 4 trucks)	30,000	
- Supervision and other general exp.	12,000	1,14,000
Total Cost (A + B + C)		5,14,299.31
Total ton-km		1,72,240
Cost per ton-km		2.99

5 M

Answer 4:

(a) (i)

	Rs.
Sales 50,000 units at Rs. 7	3,50,000
Variable cost 50,000 × 3	1,50,000
Contribution 50,000 × 4	2,00,000
Fixed costs	1,20,000
Profit	80,000

1½ M

P/V ratio $= \frac{S-V}{S} \times 100 = \frac{7-3}{7} \times 100 = \frac{4}{7} \times 100 = 57.14\%$

BEP (units) $= \frac{F}{\text{contribution per unit}} = \frac{1,20,000}{4} = 30,000$ units.

BEP (Value) = 30,000 Units × 7 = Rs. 2,10,000

Profit Rs. 80,000 (as calculated above)

(ii) with a 10% increase in output & sales i.e., 50,000+ 5,000 = 55,000 units

Contribution 55,000 × Rs. 4 per unit	Rs. 2,20,000
Fixed costs	Rs. 1,20,000
Profit	Rs. 1,00,000

1½ M

(iii) with a 10% increase in Fixed Cost

Contribution (50,000 ×Rs. 4 per unit)	Rs. 2,00,000
Fixed cost (1,20,000+ 12,000)	Rs. 1,32,000
Profit	Rs. 68,000

1½ M

(iv) with a 10% increase in variable costs

Selling price per unit	7.00
Less: variable cost (3+0.30)	3.30
Contribution per unit	3.70
Total contribution 50,000 × 3.70	1,85,000
Fixed costs	1,20,000
Profit	65,000

1½ M

(v) with a 10% increase in selling price

Selling price per unit (7.00+0.70)	7.70
Variable cost per unit	3.00
Contribution per unit	4.70
Total contribution 50,000 × Rs. 4.70	2,35,000
Fixed costs	1,20,000
Profit	1,15,000

1½ M

(vi) Effect of all the four above

Sales 55,000 × Rs. 7.70 per unit	Rs. 4,23,500
Variable cost 55,000 × 3.30	Rs. 1,81,500
Contribution 55,000 × 4.40	Rs. 2,42,000
Fixed cost 1,20,000+ 12,000	Rs. 1,32,000
Profit	Rs. 1,10,000

2½ M

Note: It is assumed that the increased output of 55,000 units has been sold.

Answer:

(b) Working Notes:-

Standard Costs

	Rs.
Direct materials (6,000 × Rs. 12)	72,000
Direct labour (6,000 × Rs. 4.40)	26,400
Variable overheads (6,000 × Rs. 3)	18,000
Total	1,16,400

1½ M

Actual Cost

Direct Materials (12,670 × 5.70)	72,219
Direct wages	27,950
Variable overhead incurred	20,475
Total	1,20,644

1½ M

Total Variance = SC- AC = 1,16,400 –1,20,644 = Rs. 4,244 (A)

Missing Figures

1. Actual Direct Labour Hours(DLH)

   We can find out this through Variable overhead efficiency variance of Rs. 1,500 adverse VOH Efficiency Variance= SR (SH – AH)

1,500 A	=	3(6,000 – AH)	**1½ M**
-1,500	=	18,000 – 3 AH	
3AH	=	18,000 + 1,500 = 19,500	
AH = 19,500/3	=	6,500 Actual Hours i.e. Actual DLH.	

2. Actual Labour Rate per hour $= \frac{\text{Rs. } 27,950}{6,500 \text{ DLH}}$ = Rs. 4.30

   Relevant Variances:

1	Material Variances:		**1½ M**
	(a) MCV = SC – AC = 72,000 – 72,219=	Rs. 219 (A)	
	(b) MPV = AQ (SR – AR) = 12,670 (6 – 5.70)=	Rs. 3,801 (F)	
	or = 19,000 (6 – 5.70)=	Rs. 5,700(F)	
	(c) MUV = SR (SQ – AQ) = 6 (6,000 × 2 –12,670)		
	= 6 (12,000 – 12,670) =	Rs. 4,020 (A)	
2.	Labour Variances:		**1½ M**
	(a) LCV = SC – AC = 26,400 – 27,950=	Rs. 1,550 (A)	
	(b) LRV = AHP (SR – AR) = 6,500 (4.40 – 4.30)=	Rs. 650 (F)	
	(c) LEV = SR (SH – AHP) = 4.40 (6,000 – 6,500)=	Rs. 2,200 (A)	
3.	Variable Overhead Variances : (Output Basis)		**1½ M**
	(a) VOH Variance = SVO – AVO= 18,000 –20,475	Rs. 2,475 (A)	
	(b) Efficiency Variance = SR (SQ – AQ) (Note1)		
	= 3 (6,500 – 6,000) =	Rs. 1,500 (A)	
	(c) Expenditure Variance = (SVOSP – AVO) (Note2)		
	= (19,500 – 20,475) =	Rs. 975 (A)	

Note :

1. One unit of production in one hour. For 6,500 DLH, 6,500 units should have been produced (SQ). But AQ=6, 000 units. i.e. less than SQ. Hence, it is adverse variance of Rs. 1,500.
2. Standard Variable Overhead on Standard Production =6,500×3 = Rs. 19,500

1 M

Answer 5:

(a) Working Notes:

(i) Computation of Allocation Ratio for Joint Costs

	Products		
	X Rs.	**Y Rs.**	**Z. Rs.**
Selling Price	13.75	8.75	7.50
Less: Anticipated margin@ 25% on cost or 20% on sales	2.75	1.75	1.50
Cost of sales	11.00	7.00	6.00
Less: Post split off cost	5.00	4.00	2.50
Joint cost per unit	6.00	3.00	3.50
Output (units)	8,000	6,000	4,000
Total output cost	48,000	18,000	14,000
Allocation ratio for joint costs	24	9	7

2½ M

(ii) Computation of net allocable joint costs

	Rs.	**Rs.**
Joint input cost including material cost		90,800
Less: Credit for realization from by-product B: Sales revenue (1,000 × Re. 1)	1,000	
Less: profit @ 25% on cost or 20% on sales	200	800
Net joint costs to be allocated		90,000

2 M

Determination of joint cost per unit of each product

Product	**Net joint costs allocation Rs.**	**Output(units) Rs.**	**Joint cost perunit Rs.**
X	54,000 (Note : 1)	8,000	6.75
Y	20,250	6,000	3.38
Z	15,750	4,000	3.94
	90,000		

2 M

Profit margin available on each product as a percentage on cost

Product	**Joint Cost Rs.**	**Post spilt off cost Rs.**	**Total Cost Rs.**	**Selling Price Rs.**	**Margin Rs.**	**Margin % on cost Rs.**
X	6.75	5.00	11.75	13.75	2.00	17.02
Y	3.38	4.00	7.38	8.75	1.37	18.56
Z	3.94	2.50	6.44	7.50	1.06	16.46

2½ M

Note: 1

$X = \frac{24}{40} \times 90{,}000 = 54{,}000$

$Y = \frac{9}{40} \times 90{,}000 = 20{,}250$

$Z = \frac{7}{40} \times 90{,}000 = \underline{15{,}750}$

$\underline{90{,}000}$

} **1 M**

Answer:

(b) Working Notes:

1. (i) Effective hours for standing charges (208 hours – 8 hours)=200 hours } **½ M**

   (ii) Effective hours for variable costs (208 hours – 28 hours) = 180 hours } **½ M**

2. Standing Charges per hour

	Cost per month(Rs.)	Cost per hour (Rs.) (Cost per month ÷ 200 hours)
Supervisor's salary $\left(\frac{\text{Rs. } 6{,}000}{3 \text{ machines}}\right)$	2,000	10.00
Rent of building $\left(\frac{1}{6} \times \frac{\text{Rs. } 7{,}000}{12 \text{ machines}}\right)$	1,000	5.00
General lighting	1,000	5.00
Total Standing Charges	4,000	20.00

} **2 M**

3. Standing Charges per hour

	Cost per month (Rs.)	Cost per hour (Rs.)
Depreciation $\left(\frac{\text{Rs.}(5{,}00{,}000\text{-}20{,}000)}{10 \text{ years}} \times \frac{1}{12 \text{ months}}\right)$	4,000	20.00 $\left(\frac{\text{Rs. } 4000}{200 \text{ hours}}\right)$
Wages	2,500	12.50 $\left(\frac{\text{Rs. } 2{,}500}{200 \text{ hours}}\right)$
Repairs & Maintenance $\left(\frac{\text{Rs. } 60{,}480}{12 \text{ months}}\right)$	5,040	28.00 $\left(\frac{\text{Rs. } 5{,}040}{180 \text{ hours}}\right)$
Consumable stores		Rs. 22.00 $\left(\frac{\text{Rs. } 3{,}960}{180 \text{ hours}}\right)$
Power (25 units × Rs.2 × 180 hours)	9,000	50.00
Total Machine Expenses	24,500	132.50

} **3 M**

Computation of Two – tier machine hour rate

	Set up time rate per machine hour(Rs.)	Running time rate per machine hour (Rs.)
Standing Charges	20.00	20.00
Machine expenses :		
Depreciation	20.00	20.00
Repair and maintenance	–	28.00
Consumable stores	–	22.00
Power	–	50.00
Machine hour rate of overheads	40.00	140.00
Wages	12.50	12.50
Comprehensive machine hour rate	52.50	152.50

2 M

2 M

Answer: 6

(a) Just in Time (JIT) Inventory Management

JIT is a system of inventory management with an approach to have a zero inventories in stores. According to this approach material should only be purchased when it is actually required for production.

JIT is based on two principles

(i) Produce goods only when it is required and

(ii) the products should be delivered to customers at the time only when they want.

It is also known as 'Demand pull' or 'Pull through' system of production. In this system, production process actually starts after the order for the products is received. Based on the demand, production process starts and the requirement for raw materials is sent to the purchase department for purchase. This can be understood with the help of the following diagram:

5 M

Answer:

(b) Difference between Bin Card & Stores Ledger

	Bin Card	Stores Ledger
(i)	It is maintained by the storekeeper in the store.	It is maintained in costing department.
(ii)	It contains only quantitative details of material received, issued and returned to stores.	It contains information both in quantity and value.
(iii)	Entries are made when transactions take place.	It is always posted after the transaction.
(iv)	Each transaction is individually posted.	Transactions may be summarized and then posted.
(v)	Inter-department transfers do not appear in Bin Card.	Material transfers from one job to another job are recorded for costing purposes.

5 M

Answer:

(c) M/s. Builder & Co. should follow cost –plus contract to quote price for the contract. Cost-plus contract 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:

(i) The practice of cost-plus contracts is adopted in the case of those contracts where the probable cost of the contracts can not be ascertained in advance with a reasonable accuracy.

(ii) These contracts are preferred when the cost of material and labour is not steady and the contract completion may take number of years.

(iii) The different cost 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 contacts, contractee is allowed to check or scrutinize the concerned books, documents and accounts. **5 M**

(iv) Such a contract offers a fair price to the contractee and also a reasonable profit to the contractor.

(v) The contract price here is ascertained by adding a fixed and mutually pre-decided component of profit to the total cost of the work.

Since, M/s Builders & Co. is not confident in quoting the price, so cost plus contact is better option to safeguard it from unexpected losses.

Answer:

(d) Molasses is a by product of sugar and treatment of by-product in cost accounting is as follows.

(i) When they are of small total value, the amount realized from their sale may be dealt as follows:

- Sales value of the by-product may be credited to Profit and Loss Account and no credit be given in Cost Accounting. The credit to Profit and Loss Account here is treated either as a miscellaneous income or as additional sales revenue.
- The sale proceeds of the by-product may be treated as deduction from the total costs. The sales proceeds should be deducted either from production cost or cost of sales. **5 M**

(ii) When they require further processing: In this case, the net realizable value of the by-product at the split-off point may be arrived at by subtracting the further processing cost from realisable value of by-product. If the value is small, it may be treated as discussed in (i) above.

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