

MILAGRES COLLEGE, KALLIANPUR - 576 114.

Semester V Test

Date : 17 - 09 - 2021 Class : III Bcom A Roll No. : 1 8 7 0 5

Subject : Cost and Management Accounting Paper :

Marks Obtained out of 100

Signature of the Invigilator

Section - C

7. $\text{passenger per km} = \frac{\text{Distance covered} \times \text{no. of passenger} \times \text{no. of trips} \times \text{no. of vehicles} \times \text{no. of days}}{\text{no. of days}}$

Onward journey : $50 \times 32 \times 2 \times 1 \times 30 = 96000$
 Return journey : $50 \times 30 \times 2 \times 1 \times 30 = 90000$
 Total passenger per km : 1,86,000

Statement of operating cost.

Bar period - 1 month
 passenger per km : 1,86,000

particular	Total cost	cost per passenger km
<u>Fixed charges</u>		
Tax (72000/12)	6000	
Other exp	8000	
Garage rent	15000	
Insurance (36000/12)	3000	
Tire & tubes	6000	
Salary to driver	15000	
conductor salary	10,000	
accountant salary	12000	
permit fee	3600	
Total fixed charges.	<u>78,600</u>	

Fixed charge per passenger km : $\frac{78,600}{1,86,000} = 0.4226$

variable charges

Depreciation = $(15,00,000 \times 10\%) = 1,80,000 / 10$
 $= \frac{15,000}{1,86,000} = 0.0806$

Diesel cost

200 km x 30 days = 6000 km.

100 km - 7000 = 4,20,000

6000 km - ? = 1,86,000

Repairs 20,000
1,86,000

Operating cost per passenger-km.

(+) Commission (5% of taking)

(+) Profit (15% of on taking)

Bus fare per passenger km.

2.2531

0.1075

2.8688

0.1793

0.5379

3.586

Computation of Commission and profit

Cost + Commission + Profit = Busfare.
80 + 5 + 15 = 100.

If Cost - Commission
80 - 5
2.8688 - ? = 0.1793

If Cost - Profit
80 - 15
2.8688 - ? = 0.5379

∴ Bus fare to be charged between two towns.

50 km x 3.586

= 179.3

Section - D

5. Apportionment of joint cost -

particular	P	Q	R
Sale	42000	20,000	18,000
(-) Profit = P = $(42000 \times 50\%)$ Q = $(20,000 \times 50\%)$ R = $(18000 \times 33.33\%)$	21000	10,000	6000
Total cost	21,000	10,000	12000
(-) Subsequent exp	7000	4000	5000
Joint cost	14000	6000	7000

Elementwise apportionment of joint cost

particular	P	Q	R
<u>Joint cost</u>			
material = P = $10,000 \times \frac{14000}{27000}$ Q = $10,000 \times \frac{6000}{27000}$ R = $10,000 \times \frac{7000}{27000}$	5185.19	2222.22	2592.60
Labour = P = $8000 \times \frac{14000}{27000}$ Q = $8000 \times \frac{6000}{27000}$ R = $8000 \times \frac{7000}{27000}$	4148.15	1777.78	2074.07
Other cost = P = $9000 \times \frac{14000}{27000}$ Q = $9000 \times \frac{6000}{27000}$ R = $9000 \times \frac{7000}{27000}$	4666.67	2000	2333.33
Total	14000	6000	7000

main product P A/c.

particular	₹	particular	₹
<u>To Joint cost</u>		By by product Q A/c.	
material	10,000	material	2222.22
labour	8000	labour	1777.78
Other cost	9000	Other cost	2000
<u>To Separate exp:</u>			6000
material	2000	By by product R A/c.	
labour	2400	material	2592.60
Other cost	2600	labour	2074.07

TO P&L Acc (B.F)	21000	labour cost	2333.33	7000
		By sales		42000
	55000			55000
By product & Acc.				
particulars	₹	particulars		₹
TO main product P Acc		By sales		20000
material	2222.22			
labour	1777.78			
Other cost	2000			
	6000			
TO Separate exp.				
material	1600			
labour	1400			
Other cost	1000			
	4000			
TO P&L Acc (B.F)	10,000			
	20,000			20,000
By by product & Acc				
particulars	₹	particulars		₹
TO main product P Acc				18000
material	2592.59			
labour	2074.07			
Other cost	2333.33			
	7000			
TO Separate exp				
material	1800			
labour	1700			
Other cost	1500			
	5000			
TO P&L Acc (B.F)	6000			
	18000			18000

Section - A

1.
$$\text{Input} = \text{Output} + \text{abnormal loss} + \text{normal loss}$$

$$\text{Input } X = 10000 + 800 + 0.1 X$$

$$X = 10,800 + 0.1 X$$

$$X - 0.1 X = 10,800$$

$$0.9 X = 10,800$$

$$X = \frac{10,800}{0.9} = \underline{\underline{12000}}$$

∴ Input = 12000 units

process			X	AIC.			
particulars	qty	rate	₹	particulars	qty	rate	₹
To material	12000	40	4,80,000	By normal loss	1200	10	12000
To wages			32000	(12000 x 10%)			
To overhead			26800	By abnormal loss	800	48.78	39022
				By next process	10,000	48.78	487778
			5,38,800				5,38,800

value of abnormal loss

$$\frac{\text{Total cost} - \text{Scrap sold} \times \text{abnormal loss units}}{\text{Input} - \text{normal loss}}$$

$$= \frac{5,38,800 - 1200 \times 800}{12000 - 1200}$$

$$= \frac{5,26,800}{10,800} \times 800$$

$$= 39022.22 \approx \underline{\underline{39022}}$$

2. Calculation of total ton km

$$= \text{Distance covered} \times \text{capacity carried} \times \text{no. of trips} \times \text{no. of vehicle} \times \text{no. of days}$$

 Onward = $40 \times 4 \times 3 \times 10 \times 25 = 1,20,000$
 Return = $40 \times 0.8 \times 3 \times 10 \times 25 = 24,000$
 Total ton km = 1,44,000

Sales - B.

6. II. On the basis of market value
 (a) Selling price at split off point.

$$\begin{aligned} \text{Sales: A} &= 7000 \times 2 = 14000 \\ \text{B} &= 3000 \times 3 = \underline{9000} \end{aligned}$$

$$\begin{aligned} \text{Sales ratio} &= 14000 : 9000 \\ &= \underline{14 : 9} \end{aligned}$$

Apportionment of joint cost

$$\begin{aligned} \text{A} &= 11,500 \times 14/23 = 7000 \\ \text{B} &= 11,500 \times 9/23 = \underline{4500} \end{aligned}$$

Statement showing profit & loss
Particulars

	A	B
Sales (A)	14000	9000
(-) Cost : Joint cost (B)	7000	<u>4500</u>
Profit = (A - B)	7000	4500

(b) After further processing

$$\begin{aligned} \text{Sales: A} &= 7000 \times 3 = 21,000 \\ \text{B} &= 3000 \times 4.50 = \underline{13500} \end{aligned}$$

$$\begin{aligned} \text{Sales ratio} &= 21,000 : 13500 \\ &= \underline{210 : 135} \end{aligned}$$

Apportionment of joint cost

$$\text{A} = 11,500 \times 210/345 = 7000$$

$$\text{B} = 11,500 \times 135/345 = \underline{4500}$$

Statement showing profit & loss

Particulars	A	B
Sale (A)	21000	13500
(-) Cost: Joint cost	7000	4500
Post separation cost	2000	1000
Total cost (B)	9000	5500
Profit (A - B)	12000	8000

2) Physical weight method

$$\text{Ratio of weight} = 7000 : 3000 \\ = 7 : 3$$

Apportionment of joint cost

$$\text{Product A's share} = 11,500 \times \frac{7}{10} = 8050$$

$$\text{B's share} = 11,500 \times \frac{3}{10} = 3450$$

Statement showing profit & loss

Particulars	A	B
Sale A = (7000 x 2) B = (3000 x 3)	14000	9000
(-) Cost: Joint cost	8050	3450
Profit	5950	5550

3) Average unit cost method

$$\frac{\text{Total joint cost}}{\text{Total units produced}}$$

$$\frac{11,500}{10,000} = 1.15$$

Apportionment of joint cost

$$\text{Product A's share} = 7000 \times 1.15 = 8050$$

$$\text{Product B's share} = 3000 \times 1.15 = 3450$$

Statement showing profit & loss particular

	A	B
Sale	14,000	9,000
- cost : joint cost	8,050	3,450
profit	5,950	5,550