

CMA TEST – 1 (SOLUTION)**TIME ALLOWED 50 MINUTES****17-2-2019****TOTAL MARKS = 30 MARKS****Ans. Q. 1: ADVANTAGES OF STUDY OF COST ACCOUNTING AND MANAGEMENT ACCOUNTING****1. The study of cost Accounting is helpful to the management in :-**

- Fixation of selling Price of various products in various markets to various customers in various situations.
 - Preparation of Budget of various functions of the business. (e.g.:- Market, Finance, Purchase, Production etc.)
 - Strategy formation a various activity levels of the management so that the best option can be selected for survival and growth.
- During Trade recession, the matter of survival carries utmost significance. Only those organisation can survive such period which are aware of their true cost price. They can appropriate decisions regarding the discounts which can be offered during off-season period.
 - The study of Cost Accounting Concentrates on Cost Control & cost Reduction in a justified & appropriate manner. Cost Control is the procedure for keeping the cost within prescribed limits. Cost Reduction is the procedure for reducing the cost but the quality of the Product must not be sacrificed.
 - Improved situation is obtained when weakness are located & rectified. The study of cost accounting is helpful in identifying those activities which are leading to material wastage and unproductive labour time. Hence, the study of cost accounting is helpful to the management in taking future corrective action so as to avoid the occurrence of same problem in the future.

Ans. Q. 2:**Operating cost statement**

| Particulars | Mine A | Mine B |
|--|--------------------------|--------------------------|
| 1 <u>Distance per round trip</u> | | |
| → Outward | 10 kilometers | 15 kilometers |
| → Return | 10 kilometers | 15 kilometers |
| Total | 20 kilometers | 30 kilometers |
| 2 <u>Tonne- kilometers Per round trip</u> | | |
| → Outward | Nil | Nil |
| → Return | 10 kilometers × 5 tonnes | 15 kilometers × 5 tonnes |
| Total | 50 tonnes- kilometers | 75 tonnes- kilometers |
| 3 <u>Time per round trip</u> | | |
| → Loading time | 30 minutes | 20 minutes |
| → Unloading time | 10 minutes | 10 minutes |
| → Travelling time | 40 minutes | 60 minutes |
| Total | 80 minutes | 90 minutes |
| 4 <u>Cost per round trip</u> | | |
| → Driver's wage etc. (₹ 9/hr) | ₹ 12 | ₹ 13.50 |
| → Fuel, oil, etc. (₹ 1.20/km) | ₹ 24 | ₹ 36 |
| Total | ₹ 36 | ₹ 49.50 |
| 5 <u>Cost per tone-km</u> | 36/50 = 0.72 | 49.50/75 = 0.66 |

Note - 1 [Travelling time] : Speed of vehicle = 30 kilometers/hr.**Mine A:** Total distance = 20 kilometers

Travelling time required = 60 minutes/30 kms × 20 kms = 40 minutes

Mine B: Total distance = 30 kilometers

Travelling time required = = 60 minutes/30 kms × 30 kms = 60 minute

Note - 2 [Driver's Wages, etc.]

Given cost = ₹ 9/hr (or ₹ 9 for 60 minutes)

For mine A, the proportionate cost for 80 minutes = 9/60 × 80 = ₹ 12

For mine B, the proportionate cost for 90 minutes = 9/60 × 90 = ₹ 13.50

Ans. Q.3: Computation of Rooms – Days

| Types | Basis | Rooms - days |
|--------------|------------------------------|---------------|
| Single rooms | 100 rooms per day × 360 days | 36,000 |
| Double rooms | 40 rooms per day × 360 days | 14,400 |
| Triple room | 18 rooms per day × 360 days | 6,480 |
| | | 56,880 |

Operating cost statement

| Particulars | Amount (₹) |
|---|------------------|
| Staff salaries | 14,25,000 |
| Room attendants' wages | 4,50,000 |
| Lighting, heating and power | 2,15,000 |
| Repairs and renovation | 1,23,500 |
| Laundry charges | 80,500 |
| Interior decoration | 74,000 |
| Sundries | 1,53,000 |
| Total cost excluding building rent | 25,21,000 |
| (+) Building rent | |
| - Fixed amount (10,000 × 12) | 1,20,000 |
| - 5% of takings | 1,76,066 |
| Total cost | 28,17,066 |
| Profit (20% of takings) | 7,04,267 |
| Takings | 35,21,333 |

Assume, Total Takings = ₹ x

Now, Total cost excluding Building rent + Building rent + Profit = Takings

$$₹ 25,21,000 + (1,20,000 + 5\% \text{ of } x) + 20\% \text{ of } x = x$$

Solving, we get $x = 35,21,333$. **Assume**, rent per room per day

| | | |
|--|--|---------------------------------------|
| Single room = ₹ x | Double room = ₹ 2.5 x | Triple room = ₹ 5 x |
| Total collections: - | | |
| Single room = 36,000 rooms -days × ₹ x per room per day | | |
| Double room = 14,400 rooms -days × ₹ 2.5 x per room per day | | |
| Triple room = 6,480 rooms -days × ₹ 5 x per room per day | | |
| Total collections = 36,000 x + 36,000 x + 32,400 x = 1,04,400 x | | |
| $\Rightarrow 1,04,400 x = ₹ 35,21,333$. Hence , $x = ₹ 33.73$. Therefore , rent per room per day | | |
| Single room = ₹ x = ₹ 33.73 | Double room = ₹ 2.5 x = ₹ 84.32 | Triple room = ₹ 5 x = ₹ 168.65 |

Q.4:

Analysis of Maintenance Cost :-

| YEAR | Kms | Total Maintenance |
|------|--------|-------------------|
| 1 | 160200 | 46050 |
| 2 | 156700 | 45175 |

$$V. \text{ Maintenance Cost per km} = \frac{\text{Difference in Total Maintenance Cost}}{\text{Difference in kms.}}$$

$$= \frac{\text{Rs. } 875}{3500\text{kms.}} = ₹ 0.25 \text{ per km.}$$

F. Maintenance cost = total maintenance – variable Maintenance

$$= 46050 - (160200 \times 0.23)$$

$$= ₹ 6000$$

Computation of total kms and total tonne-kms

| Track No. | Journey | Total Kms | Total Tonne Kms |
|-----------|--------------|-----------------------------------|-----------------------------------|
| 1 | outward | = 16 X 4 X 24 X 12 = 18432 | = 18432 X 6 = 110592 Tonne Kms |
| | Return | = 16 X 4 X 24 X 12 = 18432 | = 18432 X 0 = 0 |
| 2 | outward | = 40 X 2 X 24 X 12 = 23040 Kms | = 23040 X 9 = 207360 Tonne Kms |
| | Return | = 40 X 2 X 24 X 12 = 23040 Kms | = 23040 X 0 = 0 |
| 3 | Outward | = 30 X 3 X 24 X 12 = 25920 Kms | = 25920 X 8 = 207360 Tonne Kms |
| | Return | = 30 X 3 X 24 X 12 = 25920 Kms | = 25920 X 0 = 0 |
| | Total | 134784 Kms | 525312 Tonne Kms |

Operating Cost Statement (annual basis, For 3 Trucks)

| Particulars | Total | Per Km | Per Tonne Kms |
|---|---------|---------------|---------------|
| Standing Charges | | | |
| 1) Salary to drivers (2000 X 12 X 3) | 72000 | | |
| 2) License Fee (5000 X 3) | 15000 | | |
| 3) Insurance | 5000 | | |
| 4) Depreciation $\left(\frac{300,000 - 10,000}{10 \text{ yrs}}\right) \times 3$ | 87000 | | |
| 5) General Overheads | 10084 | | |
| 6) Fixed Maintenance Cost | 6000 | 195084/134784 | 195084/525312 |
| Total Standing Charges (A) | 195084 | =1.447 | =0.371 |
| Running Expense | | | |
| 1) Diesel $\left(\frac{\text{Rs. } 10}{4 \text{ km}} \times 134784\right)$ | 336960 | 2.5 | 0.641 |
| 2) V. Maintenance (0.25 X 134784) | 33696 | 0.25 | 0.64 |
| 3) Oil & Sundries $\left(\frac{\text{Rs. } 25}{10 \text{ km}} \times 134784\right)$ | 336960 | 2.5 | 0.641 |
| Total Running Expenses (B) | 707616 | 5.25 | 1.346 |
| Total Cost (A+B) | 902.700 | 6.697 | 1.717 |
| (+) Profit per tonne – km | | | 0.191 |
| Freight per tonne per km | | | 1.908 |