

CMA TEST- 7 (Solution)

Time Allowed: 50 mint.

Jan. 20, 2018

Total Marks: 30 Marks

Answer to Question no.1:**CENTRALISED PURCHASING & DECENTRALISED PURCHASING**

1. Centralized purchasing is the system where one common purchasing department manages the purchasing function of all the departments of the organization. Although this system enables the organization to place the order in large quantities, it may slow down the procurement process.
2. Decentralized purchasing is a system where purchasing of material is made by various departments independently as per their own requirements. It helps to purchase the materials immediately in case of urgent needs.
3. **WHICH SYSTEM IS BEST?**
It is to be decided by the organization keeping in mind the following factors:-
 - a) Nature and Quantity and quality of material to be purchased.
 - b) Location of purchase Function in business.
4. **ADVATAGES OF CENTRALISED PURCHASING**
 - a) Helps in availing quantity discount and cash discount. Hence, cost is reduced.
 - b) Prompt reporting of scrap, obsolete stock and storage losses.
5. **ADVATAGES OF DECENTRALISED PURCHASING**
 - a) Local supply sources are developed which reduces the transport cost
 - b) Different departments are made accountable and responsible in relation to their own purchase.

Answer to Question no.2:

Materials Consumed = Opening Stock + Purchases – Closing Stock

Material A = 700 + 11,500 – 200 = 12,000 kg of ₹ 12,000.

Material B = 200 + 11,000 – 1,200 = 10,000 litres of ₹ 10,000.

Material C = 1,000 + 1,800 – 1,200 = 1,600 kg of ₹ 1,600.

Average Inventory = (Opening Stock + Closing Stock)/2

Material A = (700+200)/2 = 450 kg of ₹ 450

Material B = (200 + 1,200)/2 = 700 litres of ₹ 700

Material C = (1,000 + 1,200)/2 = 1,100 kgs of ₹ 1,100.

Material Turnover Ratio = $\frac{\text{Value of materials consumed during a period}}{\text{Value of average inventory held}}$

Material A = 12,000/450 = 26.67 times

Material B = 10,000/700 = 14.29 times

Material C = 1,600/1,100 = 1.46 times

No. of days for which inventory in held = Days of the period/Inventory turnover

Material A = 365/26.67 = 14 days (app.)

Material B = 365/26.67 = 26 days (app.)

Material C = 365/1.46 = 250 days

Material A is fast moving because it is held in the store for least number of days.

Answer to Question no.3:**(i) (1) Inventory turnover ratio (Raw material)**

$$= \frac{\text{Raw material consumed}}{\text{Average stock of Raw material}} = \frac{\text{₹ 4,05,00,000}}{\text{₹ 22,50,000}} = 18 \text{ times}$$

$$\text{Average stock of raw material} = \frac{\text{Opening stock} + \text{closing stock}}{2} = \frac{\text{Nil} + 45,00,000}{2} = \text{₹ 22,50,000}$$

(2) Inventory turnover ratio (Finished goods)

$$= \frac{\text{Cost of sales}}{\text{Average stock of finished goods}} = \frac{\text{₹ 4,05,00,000}}{\text{₹ 1,08,00,000}} = 3.75 \text{ times.}$$

$$\text{Average stock of finished goods} = \frac{\text{Opening stock} + \text{closing stock}}{2} = \frac{\text{Nil} + 2,16,00,000}{2} = \text{₹ 1,08,00,000}$$

$$\text{(3) Input-Output ratio} = \frac{\text{Input consumed}}{\text{Output obtained}} \times 100 = \frac{1,80,000 \text{ units}}{1,60,000 \text{ units}} \times 100 = 112.5\%$$

$$\text{Input consumed (in quantity)} = \frac{\text{₹ 4,05,00,000}}{\text{₹ 225 p.u}} = 1,80,000 \text{ units}$$

$$\text{(4) Stock-out ratio} = \left(\frac{\text{Orders held up due to stock shortage}}{\text{Total orders received}} \right) \times 100$$

$$= \frac{12,000 \text{ units}}{(1,00,000 + 12,000 + 8,000) \text{ units}} \times 100 = 10\%$$

Explanation: - During the year, the company has received order of 1,20,000 units and out of which, the order of 12,000 units could not be fulfilled due to stock shortage. Hence, the company fails to fulfill 10% of total ordered quantity.

(ii) Comments:-

- (1) Raw material turnover ratio (18 times) is maintained at high level which means that the consumption of raw material is at fast speed and stock of raw material is held for short period. This situation is favorable to the organization.
- (2) Finished goods turnover ratio (3.75 times) is maintained at low level which means that sale of finished goods is at slow speed and stock of finished goods is held for long period. This situation is unfavorable to the organization.
- (3) Input output ratio of 112.5% means that 12.5% of total input is wasted in manufacturing procedure.
- (4) Stock-out ratio indicates that the organization lacks internal control system in context of stock management.

Answer to Question no.4:**A. Computation of Gross Quantity of Raw material to be purchased:-**

Total Output (3,000 + 2,000)	5,000
+ Manufacturing scrap:-	
Department P (5%) of final output (5,000)	250 tonnes
Department Q (10%) of final output (5,000)	500 tonnes
	5,750 tonnes

B. Selection Of Best Supplier:-

Particular	Supplier L	Supplier M	Supplier N
Basic Purchase Price / tonne	₹ 65,000	₹ 60,000	₹ 70,000
Less :- Discount/tonne	-	-	(₹ 3,500)
Transportation Cost	₹3,000	₹ 5,000	-
Effective Purchase Price	₹ 68,000	₹ 65,000	₹ 66,500

Available Purchase Options:-

1. Total Quantity of 5,750 tonne to be purchased from Supplier N @ ₹ 66,500/ tonne.

Total Purchase cost = 5,750 × 66,500 = ₹ **38,23,75,000**

2. Total Quantity of 4,000 tonne to be purchased from Supplier M @ ₹65,000/ tonne.

Total Purchase cost = 5,750 × 66,500 = ₹ **26,00,00,000**

Balance 1,750 tonnes from Supplier L @ ₹68,000/ tonne

Total Purchase cost = 1,750 × 68,000 = ₹ **11,90,00,000**

Total **37,90,00,000**

Average Purchase Price = 37,90,00,000 / 5,750 tonnes = ₹ **65,913 / tonne**

c) Computation of estimated Profit in the Next Year.

Particulars	₹
Material cost (already calculated above)	37,90,00,000
Labour cost (20,00,000 + 50,00,000)	70,00,000
Overheads (60,00,000 + 1,50,00,000)	2,10,00,000
Less:- Sale of Scrap value :-	
Department P : 250 tonne @ ₹ 20,000	
Department Q : 500 tonne @ ₹ 25,000	(1,75,00,000)
Cost of production	38,95,00,000
Add:- Distribution Cost (10% of Profit cost)	3,89,50,000
Total Cost	42,84,50,000
Profit (Bal. Figure)	51,15,50,000
Sales	94,00,00,000