M. Com. IV Semester

Paper — Ist

Subject - Advanced Cost Accounting
(उच्चतर लागत लेखांकन)

Lecture By :

Dr. Rajesh Kesari
Associate Professor
(Ex. HOD & Dean)
Commerce faculty
Nehru Gram Bharati
(Deemed to be)
University, Prayagraj

Unit – II :

Need, objects and Methods of Material Control.
सामग्री नियन्त्रण की आवश्यकता, उद्देश्य एंव विधियाँ .

D. Need of material control

The term 'material or inventory control' has a wide meaning and covers a number of functions. It implies control over all aspect of materials purchase receipt, inspection, storage, issue, verification and payment.

Objects of material control

The following are the objectives of materials control:

1   To ensure availability of material
2. To avoid excessive investment an material.
3. To procure and issue materials at reasonable price.
4. to minimize wastage and spoilage.
5. To minimize the Ricks of obsolescence, theft, etc
6. To ensure proper and timely payment to the suppliers

Methods of Inventory control

ABC Analysis: ABC Analysis is also known as proportional parts value Analysis. Under this method (Always better control) efficient control of store is required to give more care on costlier item As such, on the basis of the value of different materials; items are grouped into three categories.

1. High priced materials (A)
2. Medium priced materials (B)
3. Low priced materials (C)

The material which are costly and from a small part of the total inventory, can be grouped under A. Greater degree of care should be taken in storing and in the use of such items marked. "A". for there category of material, high price has to be paid and the number of items is small. On the other hand, certain material do not require much investment, and the number of such items is usually large, marked "C". The material which have moderate value may be marked "B".

Stock items	% of total items	% of Material cost
A	10%	70%
B	20%	20%
C	70%	10%

These groups will facilitate the management to exercise control on the basis of value of material.

Advantages:

1. It ensures stricter control over the higher value items.
2. Management may be 'selective' in approach and may show better results by adopting this method.
3. It helps in reducing unnecessary clerical cost
4. It minimizes the storage cost as only required quantity of material may be bought.

Economic Order Quantity (E.O.Q.)

The E.O.Q. is fixed is such a manner as minimize the cost of ordering and carrying the stock. That is, ordering cost and inventory carrying cost.

Ordering cost: These arise out of the following factors

(a) Rent for the space used by purchasing department.
(b) The salaries and wages of staff in the department.
(c) The depreciation on the equipment and furniture by the department.
(d) Postage and telephone bills.
(e) The stationery and other consumables needed by the staff.
(f) Travelling expenses, if any.

Inventory carrying cost: These arise out to the following factors.

(a) Loss of interest on the capital invested in material
(b) Rent for the storage space.
(c) Salaries of the store keeping department.
(d) Any loss due to pilferage and deterioration.
(e) Stores insurance charges.
(f) Stationery etc used by the stores
(g) Taxes on inventories.

Methods E.O.Q : There are three methods of determining EOQ.

1. **Analytical Method:** Under this method, the quantity of annual consumption of material is order. For each size of order the various costs are recorded and added. The EOQ will be that size of order whose total cost is the lowest.

1. **Arithmetic Method:** This is a popular method of determining EOQ. For this, we use formula to calculate it.

$$EOQ = \sqrt{\frac{2AB}{C}}$$

A = Annual usage or consumption in Units.

B = Buying or ordering cost per Unit.

C = Carrying cost per Unit or carrying cost percentage.

Illustration: Calculate the economy order quantity from the following information

Annual usage = 20000 Units

                    Ordering or buying cost per order ___ Rs.10

                    Cost Per Unit.......................................Rs.100

Cost of carrying Inventory_____ Rs.10%

Solution: $E.O.Q = \sqrt{\frac{2AB}{C}}$

$$\sqrt{\frac{2 \times 20000 \times 10}{10}} = \sqrt{40000} = 200 \text{ units}$$

Carrying cost per unit $= \dfrac{100 \times 10}{100} = Rs.10$

No. & Order $= \dfrac{20000}{200} = 100$ Orders per year

(3)   **Graphical Method:** According to this method, the ordering cost, carrying cost and total cost are plotted on the graph on the basis of order site. The point, at which the carrying cost line and ordering cost line bisects each other indicates the EOQ At the point the total cost is also of the lowest.