ASSIGNMENT - 3

1. Write importance of Material Management.
   1. It Ensures smooth production flow.
   2. It increases Inventory turnover.
   3. It reduces material obsolescence.

2. Define Safety stock / Buffer stock.
   Safety stock is defined as the extra stock available to a company to minimize the risk of failure of existing inventory.

3. Define Reorder level.
   Reordering stock level means that when the quantity of Materials reaches as certain level, a new purphase order is sent to get Materials from supplier again.

4. List out purchase records.
   1. purchase Requistion form
   2. Request for quotation
   3. Supplier for Quotation
   4. purchase order
   5. Invoice.

5. List duties of store keeper.
   1. To keep all record systematic & upto date.
   2. To store stocks in minimum space.
   3. To ensure a regular supply of materials to the store.

6. What is cardex method
   The most popular manual 'check in' method for materials Card is cardex. It refers to the cards that store detailed information

Long :-

1. Objectives and functions of material management.

objectives :-

1. To participate in make or buy decisions.

2. To improve the Quality of product.

3. To train staff to increase operational efficiency.

functions :-

1. Materials planning

2. Inventory control

3. External transportation

4. Material research

5. Waste management.

2. Derive Expression of EOQ for Inventory control.

EOQ is Economic order Quantity represents the most approp-
-riate or optimal quantity to order for each new order

EOQ

The formula for $EOQ = \sqrt{\dfrac{2 \times A \times P}{C}}$

A = Annual demand
P = procurement cost per order.
C = Annual carrying cost per unit

This formula is derived from following cost function:

Total procurement cost = no. of order placed in a year $\times$
procurement cost per order.

$$= (A/Q) \times P$$

Inventory carrying cost per annum = (Average value) of Inventory cost per year) $\times$ (Annual Carrying cost per unit)

$$= (Q/2) \times C$$

$\therefore$ Total cost $= (A/Q) \times P + (Q/2) \times C$.

This total cost is minimum when procurement cost = Inventory carrying cost.

$$A \cdot P/Q = Q/2 \times C \qquad (or) = \sqrt{\frac{2 \times A \times P}{C}}$$

3. Explain ABC analysis.

Always Better control (ABC) analysis is also known as the pareto principle, an economic principle developed by Economist wilfred pareto. This analysis is based on most criteria.

ABC analysis divides inventories into 3 categories in terms of percentage of no. of items and the percentage of total value.

Advantages :-

1. It helps to plan inventory control better.

2. It reduces strrage costs.

3. The company can focus on high-quality items.

4. It reduces inventory carrying costs.

5. It helps to trace obsolete materials easily.

4. Explain functions of purchasing department.

1. preparation of the purchasing budget.

2. Finding and selecting qualified sources of supply

3. pre-delivery, follow-up and determination of material storage.

4. obtain supplier, invoice for payment.

5. coordinate incoming inspection; including timely return of defective materials to suppliers.

5. Functions of stores department.

1. To get all kinds of materials, goods & equipment form camps.

2. To ensure a regular supply of materials to the stores.

3. To keep all records systematic and uptodate.

4. To take all neccessary precautions to prevent theft.

5. To coordinate & collaborate which the purchasing, manufacturing and production planning & control departments.