ASSIGNMENT : 10

UNIT : 5 Exercise on Inventory model

1. The production department for a company requires 3500kg.of row material for manufacturing a particular item per year. It has been estimated that the cost of placing an order is Rs.35& the cost of carrying inventory is 25 percentage of the investment in the inventories. The price is Rs.10 per kg.The purchase manager wishes to determine an ordering policy for raw material. Calculate (1)The optimal lot size(2)The minimum yearly variable inventory cost(3)The optimal order cycle time(4)The minimum yearly total inventory cost.

2. Explain the following terms in connection with inventory management. (1) Re-order point (2) Safety stock (3) Lead time (4) Economic lot size (5) Carrying cost

3. The annual demand of a product is 15,000 units. Each unit cost Rs.50/- if the orders are placed in quantity below 150 units. For order of 200 and above the unit prize is Rs.44/-. Assume inventory holding cost is 12% of the value of item and ordering cost is Rs.2/- per order find the economic lot size