CONCLUSION

In this dissertation work we have implemented various parameters and derived some inventory models in different concepts. The two parameter Weibull distribution deterioration is considered for all models, because the distribution is appropriate for all the items with decreasing rate of deterioration.

FINDINGS

It is concluded that the lot size is affected by the demand of the product and the demand is dependent on the price of the product., so in order to maximize the profit, a vendor can either increase the price or shorten the inventory holding time to counteract a greater loss due to a higher deterioration rate.

The planned shortage model incorporates a backordered cost into the EOQ model. Hence, it is advisable that, items that have relatively high shortage cost are most likely carried in stock, while items with relatively high holding cost are most likely to be on backorders. It is suggested that in order to determine the necessary safety stock to accommodate a desired service level, a firm can undertake a statistical analysis. When the backlogging rate is increased, it results in increase in inventory period, decrease in order quantity and increase in total cost per time unit.

Similarly the effect of inflation and time value of money on the present value of total cost is more significant, it highlights that the total cost decreases as the inflation rate increases. Further, in increasing the fresh product time, there is an increase in the order quantity and the total cost.

Finally it is recommended that the review of inventory may be done on a continuous or a periodic basis. Order quantities may be fixed or adjusted to bring the inventory up to a specified level.
FUTURE STUDY

There are many areas in inventory control theory which can be extended further by introducing additional conditions such as studying the case of limited capacity for storage or reserve inventory, considering inflation and time value of money for all models, permitting credit discount to all perishable items and the case of not ordering every time can be incorporated in a future study.

Moreover these problems can be further improved by introducing the concept of decaying inventories. Although the inventory techniques discussed here may reduce the firm’s annual inventory expenses, the simplified approach is, to solve the problem for a number of different scenarios and determine a range of optimal solutions, once the range has been established, the management can select the policy with which it feels most comfortable.
REFERENCES


