Abstract

Today's due to competitive business scenarios, the suppliers provide his/her retailers a discount in price of a product. To attract the customers to buy more products at one time, the retailer managed the demand rate depends on price and stock dependent which is very realistic in day to day life. The holding cost is assumed to be variable. For this we proposed a model to solve such types of problems to determine the optimal replenishment policy for non-instantaneous deteriorating products. Numerical example is provided to demonstrate the optimal total profit for discussed inventory model.


**Index Terms**

Computer Science

Information Sciences

**Keywords**

Inventory, Non-instantaneous deterioration, Variable holding cost, price and Stock-dependent demand.