

1086-90-254

Vikramjeet Singh* (vikram31782@gmail.com), Lovely Professional University, Jalandhar-Delhi G. T.Road(NH-1),Block-34-201, Department of Mathematics, UID-12087, Phagwara,Punjab, 144402, India. *Modeling and Analysis of an Inventory System with Ramp Type Demand Rate and Backlogging.*

In this paper an inventory model for deteriorating and ameliorating items with variable holding cost has been developed. We considered the ameliorating items which follow time varying demand with ramp type pattern. Shortages are permitted and partially back-ordered. The back-ordering fraction is taken to be decreasing function of waiting time. Total cost of the system is formulated and optimal replenishment policy is derived, keeping in view the above factors of the system. (Received August 14, 2012)