

On Perishable Inventory with Markov Chain Demand Quantities

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Abstract

An inventory problem of the $(*,*)$ type in which demand quantities form a Markov Chain is considered. An item is always on exhibition where life time is having the Erlang- $*$ distribution $(**2)$. Inter-arrival times of demands are i. i. d. random variables having a general distribution. Lead time is zero and no shortage permitted. The Inventory level probabilities at arbitrary time point in finite time and in the long run are given. Some particular cases discussed.

Keywords: Perishable Inventory, Markov Chain Demand, Markov-Renewal Process.
