

## ON INTUITIONISTIC FUZZY INVENTORY MODELS WITHOUT ALLOWING STORAGE CONSTRAINT

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### ABSTRACT

This paper deals with the problem of determining the economic order quantity (EOQ), as a function of the setup cost and the holding cost in the interval sense. Practically vagueness caused by the variation in fixing these costs is inevitable. Intuitionistic fuzzy inventory model with instantaneous replenishment and no shortages is analyzed to compute the economic order quantity and the total annual cost by assigning fuzzy quantity and intuitionistic fuzzy quantity instead of real quantity to these costs. Parametric programming technique is applied and the results are compared numerically both in fuzzy optimization and intuitionistic fuzzy optimization techniques. Necessary graphical presentations are also given besides numerical illustrations.

**KEYWORDS:** Inventory, Economical Order Quantity (EOQ), Fuzzy Optimizations, Intuitionistic Fuzzy Optimization, Parametric Programming Technique