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STOCHASTIC MODEL ON THE MEAN TIME TO RECRUITMENT FOR A TWO GRADED MANPOWER SYSTEM ASSOCIATED WITH A UNIVARIATE POLICY OF RECRUITMENT INVOLVING COMBINED THRESHOLDS

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Abstract

In this paper, an organization with two grades subjected to loss of manpower due to the policy decisions taken by the organization is considered. A mathematical model is constructed and an appropriate univariate recruitment policy, based on shock model approach involving combined optional thresholds and combined mandatory thresholds for the loss of manpower in the organization is suggested. The expected time for recruitment is obtained for different cases on the distribution of the thresholds when the loss of manpower and the inter-decision times form independently, a sequence of independent and identically distributed exponential random variables. The analytical results are substantiated by numerical illustrations and relevant conclusions are presented.

Key Words : Manpower planning, Two grades, Shock models, Univariate recruitment policy, Mean time to recruitment.

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