

## البحث السادس (مشترك)

**Title:** Estimation of Generalized Exponential Distribution based on an Adaptive Progressively Type-II Censored Sample

**Author:** M.M.M. Mohie El-Din, M.N. Amin, **A.R. Shafay** and Samar Mohamed

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**Abstract.** In this paper, based on an adaptive Type-II progressively censored sample from the generalized exponential distribution, the maximum likelihood and Bayesian estimators are derived for the unknown parameters as well as the reliability and hazard functions. Also, the approximate confidence intervals of the unknown parameters, and the reliability and hazard functions are calculated. Markov chain Monte Carlo method is applied to carry out a Bayesian estimation procedure and in turn calculate the credible intervals. Moreover, results from simulation studies assessing the performance of our proposed method are included. Finally, an illustrative example using real data set is presented for illustrating all the inferential

procedures developed here.

