

ESTIMATION FOR GENERALIZED GOMPERTZ DISTRIBUTION BASED ON ADAPTIVE TYPE-II PROGRESSIVE CENSORED SCHEME

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SUMMARY

In this paper, point and interval estimations of generalized Gompertz distribution (GGD) based on adaptive Type-II progressive censored scheme are investigated using the maximum likelihood and Bayesian methods. Markov chain Monte Carlo approximation (which is a special case of Metropolis-Hastings (M-H) within Gibbs sampling) is used to solve the integrals in the case of Bayesian procedure and hence the credible intervals are calculated. Finally, Monte Carlo simulation study is conducted for assessing the performance of the methods of estimation developed here.

Keywords and phrases: SAdaptive Type-II progressive censored scheme; Bayesian and non-Bayesian estimation; Generalized Gompertz distribution; Markov chain Monte Carlo technique.

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