ABSTRACT

This paper develops a Bayesian analysis of the scale parameter in the Weibull distribution with a scale parameter θ and shape parameter β (known). For the prior distribution of the parameter involved, inverted Gamma distribution has been examined. Bayes estimates of the scale parameter, θ , relative to LINEX loss function are obtained. Comparisons in terms of risk functions of those under LINEX loss and squared error loss functions with their respective alternate estimators, viz: Uniformly Minimum Variance Unbiased Estimator (U.M.V.U.E) and Bayes estimators relative to squared error loss function are made. It is found that Bayes estimators relative to squared error loss function dominate the alternative estimators in terms of risk function.