

ABSTRACT

CHARACTERISTICS OF PARAMETER ESTIMATOR GENERALIZED WEIBULL DISTRIBUTION USING GENERALIZED METHOD OF MOMENT

By

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Generalized weibull distribution is a generalization of the weibull distribution by adding one new parameter that a location parameter(α). Related to parameter estimation for continuous distribution we know several methods of estimation, one of methods is a generalized method of moment. In this study, we examine the characteristics of parameter estimator of generalized weibull distribution using generalized method of moment. We investigate the characteristics of unbiasedness, minimum variance, and consistent. The results show that the characteristics of parameter estimators ($\hat{\alpha}, \hat{\beta}, dan \hat{\delta}$) are unbiased and have minimum variances. The variances attain Rao-Cramer lower bound. By using software R version 3.1.2, this research also present the graphs of probability density function with different values of parameters.

Keywords: *Generalized Weibull Distribution, Generalized Method Of Moment, Unbiasness, MinimumVariance, Consistent.*