BAYES ESTIMATORS OF THE
PARAMETERS OF A MIXTURE OF TWO
EXPONENTIAL DISTRIBUTIONS

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B.Sc. (STATISTICS)
1995

Thesis submitted in partial fulfillment of the requirements of
the degree of Master of Science (Statistics) at Yarmouk University

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Thesis approved on January, 6, 1998
ABSTRACT

In this thesis, we considered n items from a mixture of two exponential distributions with parameters $\theta_1$, $\theta_2$ and proportion $p$. The Bayes estimators are computed using complete sample and also using censored sample.

Mean squared error (MSE) and the results from the simulation are used to compare between the estimators obtained under Linear exponential loss (LINEX) and squared error loss functions.

The same work was done for the mixture of two distribution $G(2, \frac{1}{\theta_1})$ and $G(2, \frac{1}{\theta_2})$ and proportion $p$.

Also we obtained prediction interval for the next observation $Y$ in the case of a mixture of two exponential with complete and censored sample.