1145-VT-1450 **Tulika Rudra Gupta*** (tulika28893@gmail.com), Department of Mathematics, Indian Institute of Technology, Kharagpur, Kharagpur, Kharagpur, WestBengal 721302, India, and **Somesh Kumar** (smsh@maths.iitkgp.ac.in), Department of Mathematics, Indian Institute of Technology, Kharagpur, Kharagpur, Kharagpur, WestBengal 721302, India. *Estimation of a Stress-Strength Index for Exponential Populations.*

Stress-strength reliability is widely used in manufacturing industry for producing good quality equipment. A new stress-strength index has been introduced recently. In this paper, we consider estimation of this index for exponential distributions. Various estimators such as the maximum likelihood, the uniformly minimum variance unbiased, the plug-in best scale equivariant and Bayes estimators have been derived. A generalized Bayes estimator is obtained which is shown to be a limit of Bayes estimators. A detailed simulation study is conducted to numerically compare the risk performance of various estimators. (Received September 22, 2018)