

## Stochastic ordering constraint for ordered extremes

### ABSTRACT

The constraint of two ordered extreme minima random variables when one variable is considered to be stochastically smaller than the other one has been carried out in this article. The quantile functions of the probability distribution have been used to establish partial ordering between the two variables. Some extensions and generalizations are given for the stochastic ordering using the important of sign of the shape parameter.

**Keyword:** Bivariate extreme model; Generalized extreme for minima; Ordered extreme stochastic ordering