A Note on the Correlation Bounds for Some Ordered Random Variables

A.H. Khan, Zaki Anwar and Mohd. Faizan Aligarh Muslim University

Abstract

A sharp upper bound of the correlation between two m-generalized order statistics which includes the results for order statistics and upper record values as its special cases, has been obtained and the distribution function for which this bound is attained has been identified. Similar results for m-dual generalized order statistics are also obtained.

Keywords: Order statistics, records, generalized order statistics, dual generalized order statistics, correlation coefficient.