

## Abstract

The ordered random variables play important roles in the theory and practice of statistics. They possess significant statistical properties. Over the last few decades, many articles on various topics of ordered statistical data have appeared. It was a special interest to coordinate and edit an interesting research problem based on material contributed by several important researchers from all over the world. In this study the estimation of parameters with different methods using the  $k^{th}$  record values from Burr XII distribution will be discussed and based on different estimation hazard function will be obtained. At the beginning we will give brief definition of  $k^{th}$  record data, hazard function and Burr XII distribution function.

### 0.1 Order Statistics and Record Values

Order statistics and record values appear in many statistical applications and are widely used in statistical modeling and inference. A form of the joint distribution of  $n$  ordered random variables is presented that enables a unified approach to a variety of models of ordered random variables, e.g. order statistics and record values. Generalized order statistics, provide a suitable approach to explain similarities and analogies in the two models and to generalize related results. The definition of random