I

Properties and Application of Conformable Fractional Kumaraswamy Inverse Exponential Distribution

By

Leen Khaled Obeid

Supervisor

Prof. Iqbal H. Jebril

Al-Zaytoonah University of Jordan, 2024

Abstract

This thesis aims to evaluate the flexible and superiority of the Kumaraswamy inverse exponential distribution using fractional differential equations. As well as finding some basic concepts such as cumulative distribution, survival and risk functions. Expected values, moments, mean, and variance, are presented as compatible fractional analogues. Distributions have many applications in probability and other applied sciences.

Keywords: Kumaraswamy inverse exponential distribution, conformable definition.