

Abstract:

We propose a six parameters McDonald Modified Burr III distribution. This distribution contains several special cases as Modified Burr-III, Burr-III, Beta Burr-III, Kum Burr-III distributions etc. We obtain its Hazard function, survival function, moments, Renyi entropy, β -entropy and mean deviation. We also use the method of maximum likelihood to estimate the estimated parameters of our proposed distribution. Simulation study is also performed for different values of sample size. The new proposed model is applied on real life data set and it shows that our proposed distribution is better model than other important models.