Ram K. Saxena, Tibor K. Pogany, Ravi Saxena, Dragana Jankov

On generalized Hurwitz–Lerch Zeta distributions occurring in statistical inference

Abstract. The object of the present paper is to define certain new incomplete generalized Hurwitz–Lerch Zeta functions and incomplete generalized Gamma functions. Further, we introduce two new statistical distributions named as, generalized Hurwitz–Lerch Zeta Beta prime distribution and generalized Hurwitz–Lerch Zeta Gamma distribution and investigate their statistical functions, such as moments, distribution and survivor function, characteristic function, the hazard rate function and the mean residue life functions. Finally, Moment Method parameter estimators are given by means of a statistical sample of size $n$. The result obtained provide an elegant extension of the work reported earlier by Garg et al. [1] and others.

References