

1161-60-152

Keshav Pokhrel* (kpokhrel@umich.edu), MI 48128. *Composite Generalizers of Weibull Distribution: Order of Compositions in the light of Reliability Models.*

We study the composite generalizers of Weibull distribution using exponentiated, Kumaraswamy, transmuted, and beta distributions. The composite generalizers are constructed using both forward and reverse order of each of these distributions. The usefulness and effectiveness of the composite generalizers and their order of composition is investigated by studying the reliability behavior of the resulting distributions. Two sets of real-world data are analyzed using the proposed generalized Weibull distributions. (Received August 16, 2020)