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Gokarna R Aryal (aryalg@pnw.edu), Hammond, IN 46323, **Sher B Chhetri*** (sbchhetri.math@gmail.com), Boca Raton, FL 33431, **Hongwei Long** (hlong@fau.edu), Boca Raton, FL 33431, and **Alfred A. Akinsete** (akinsete@marshall.edu), Huntington, WV 25755.
Generalizations Using the Composition of Beta Distribution and Truncated Poisson Distribution. Preliminary report.

In this article, we propose and study a new family of distribution which is defined by using the genesis of the truncated Poisson distribution and the beta distribution. Some mathematical properties of the new family including ordinary and incomplete moments, quantile and generating functions, mean deviations, order statistics and their moments, reliability analysis are discussed. We also discuss the parameter estimation issues and potential application of such generalized family of distributions. (Received September 26, 2017)