

ON GENERALIZED POISSON DISTRIBUTIONS

Bores Lerner
Amjad Lone
Murali Rao

Abstract: In this paper, we show that, for $\theta > 0$ and λ in $[0, 1]$, the measure μ defined on nonnegative integers by

$$\mu(n) = \frac{\theta(\theta + n\lambda)^{n-1}}{n!} e^{-n\lambda - \theta}$$

defines a probability distribution (called *Generalized Poisson Distribution* and abbreviated as GPD). Furthermore, we show that, for $\lambda > 1$, μ does not define a probability measure, and finally we prove that GPD is a particular case of the compound Poisson distribution.

2000 AMS Mathematics Subject Classification: Primary: -; Secondary: -;

Key words and phrases: -

THE FULL TEXT IS AVAILABLE [HERE](#)