CHAPTER 35

MATHEMATICAL SCIENCES
STATISTICS

Doctoral Theses

299. SHARMA (Vandana)
Classical and Bayesian Inferences for Some Distributions Useful in Reliability Theory.
Supervisor : Dr. Ajit Chaturvedi
Th 16501

Abstract

Derives a family of inverse distributions with the help of Weibull distribution and show that many inverse distributions follow as specific cases. Statistical properties of this family of distributions are studied. Deals with the problem of determining truncation number and sample size for two families of lifetime distributions. The estimation problems considered by Pal, Ali and Woo (2005) and Ali, Pal and Woo (2005) are revisited. Considers the zero-truncated negative binomial, zero-truncated binomial and zero-truncated poisson distributions as the reliability models.

Contents

1. The conception, growth and development of the reliability inference. 2. A family of inverse distributions and related estimation and testing procedures for the reliability function. 3. Bayesian estimation procedures for a family of inverse distribution under squared-error and entopy losses. 4. Bayesian life test planning for families of lifetime distributions: some extract and approximate solutions. 5. Estimation of stress-strength reliability in two-parameter exponential and generalized uniform distributions. 6. Bayesian estimation procedures for the zero-truncated negative binomial and zero-truncated poisson distributions. Bibliography.

M.Phil Dissertations

300. SARBJIT SINGH
Order Statistics From Discrete Distributions : A Review.
Supervisor : Prof. Jagdish Saran

301. SASHMITA SAHU
Response Surface Approach to Robust Parameter Design : A Review.
Supervisor : Dr. Poonam Singh

302. SHAILESH KUMAR
Estimation of Finite Population Variance : A Review.
Supervisor : Prof. M. C. Agrawal

303. SOUMYA (A)
Resampling Techniques in Survey Sampling : A Review.
Supervisor : Prof. M. C. Agrawal

304. SRIVASTAVA (Sugandha)
Randomized Response Techniques in Survey Sampling : A Review.
Supervisor : Prof. M. C. Agrawal

305. TIWARI (Rashmi)
Relationships For Single, Product and Higher Order Moments of Order Statistics From Exponential and Related Distributions : A Review.
Supervisor : Prof. Jagdish Saran