

SUMMARY AND CONCLUSION

The main work of this dissertation together with conclusions and recommendations for future work are given in this part.

In Basic Concepts, various terms and definitions required for the preparation of this dissertation were explained.

Chapter I covered the designing and estimation of consumer protection of generalized tightened two level continuous sampling plan having general clearance numbers and general sampling rates of inspection. Operating procedure, derivation of performance measures using Markov chain approach were provided. Designing indexed by (AQL, AOQL) and (LQL, AOQL) were given. Estimated consumer protection with the values of LQL and f .

Chapter II dealt with the designing and analysis of consumer protection of generalized tightened three level continuous sampling plan having general clearance numbers and general sampling rates of inspection. The operating procedure of the plan and the derivation of performance measures using Markov chain approach were given. Designed the plan using the quality indices (AQL, AOQL) and (LQL, AOQL). Analyzed consumer protection is also analyzed based on LQL and f .

The operating procedure, the derivation of performance measures using the Markov-chain approach, designing of the combined plan indexed by (f , AQL) and (f , LQL) along with estimation of AOQL and AFI were presented for the combined continuous lot by lot acceptance sampling plan in Chapter III.

Proposed a new multifaceted continuous lot by lot acceptance sampling plan in Chapter IV the operating procedure, derivation of performance measures were given. The evaluation by the quality indices were carried out.

In each and every chapter, illustrated numerically the implementation of the plan, constructed tables to select plans under given specifications and indicated the method of construction of tables.

Recommendations for Further Research

Developed plans may be designed

- (i) to meet simultaneously the needs of consumer and producer
- (ii) to the process model with p as a random variable
- (iii) to accommodate the presence of inspection error

Paper Published

Published a paper entitled “Designing of Combined Continuous Lot by Lot Acceptance Sampling Plan”, in *International Journal of Scientific Research, Engineering and Technology*, Vol. 4, Issue 6, June 2015, pp.709 – 715 (ISSN : 2278-0882).

Conference Attended

Presented a paper on “Consumer Protection in Two level and Three level Continuous Sampling Plans” in the National Conference on *Recent Developments in Applications of Mathematics* held on 13th of March 2015, at Karpagam University, Coimbatore.