CONCLUSIONS
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Traditional sampling plans have wide potential applicability in industries to ensure higher standard of quality attainment and increased customer satisfaction.

Bayesian Acceptance sampling is the technique, which deals with procedures in which decision to accept or reject lots or process based on the examination of past history or knowledge of samples. Here, the concept of Bayesian techniques to propose a five new methodologies for designing classical sampling plans in which disposal of a lot on the basis of repeated group sample results dependent on the outcome of the immediately preceding lots. For practical utility of the plan, Poisson unity values have been tabulated for a wider range of plan parameters. The present development would be a valuable addition to the literature and a useful device to the quality control practitioners. The concept of this investigation may be of assistance to quality control engineers and plan designers towards the development of further new plans.

The present work mainly relates to the construction and selection of tables for Bayesian Single Sampling Plan, Bayesian Chain Sampling Plan, Bayesian Multiple Deferred State sampling Plan, Bayesian Conditional Repetitive Group Sampling Plan, Bayesian Quick switching system and Bayesian Skip-lot Sampling Plan with special type double sampling plan as reference plan indexed through incoming and outgoing quality levels and relative slopes at the maximum allowable average percent defective (MAAPD). Conversions of parameters are
also studied. Tables are provided here which tailor-made, handy and ready-made use to the industrial shop-floor condition. The plan is more economical, owing to fewer inspections upgrading the inspection job from monotonous piece – by – piece decisions to lot – by – lot decisions. Rejection of entire lots rather than the return of defectives provide stronger motivation for improvement.

Towards finding statistical validity for any sampling plan, first, the objective of the inspection should be determined based on past performance, other control which includes potential failure modes and so on. Then the AQL and LTPD of the sampling plan should be documented to demonstrate that the sampling plan meets this objective. Further, different sampling plans may be statistically valid at different times during the life of a process; all sampling plans should be periodically be reviewed. If you don’t know the protection provided by your sampling plans, a good first step is to document all of your sampling plans with AQL and LTPD.

The past performance and present history of the product quality are equally considered through Bayesian Approach with which the entire result on this thesis is carried out. Further the results relating to the application of Simulation, Pivot table, Artificial Intelligence and Expert System are well studied with acceptance sampling procedures with the creation of very large database.