CONCLUSIONS...
CONCLUSIONS

Acceptance Sampling is the technique which deals with a procedure in which decision either to accept or reject lots or process are based on the examination of samples. The work presented in this thesis mainly relates to the construction and selection of performance measures for Quality Interval Sampling (QIS) inspection plans indexed through Quality Regions. Conversions of parameters are also provided for convenience. Tables are provided which are tailor-made, handy and ready-made use to the industrial shop-floor conditions.

This Thesis throw light on the acceptance sampling plans which are compared with 100% inspection, has the following advantages;

1. More Economical, owing to fewer inspections.
2. Less handling of units during inspection.
3. Fewer inspection, thereby simplifying recruiting training and supervising.
4. Upgrading the inspection job from monotonous piece-by-piece decisions to lot-by-lot decision.
5. Applicable to destructive testing.
6. Rejection of entire lots rather than the return of defectives, thereby providing stronger motivation for improvement of quality.
Designing procedure adopted in this thesis are:

- Designing of Sampling Plans using Quality Regions
- Designing of Sampling Plan using Tangent Angle
- Designing of Sampling Plan using Trigonometric Ratios
- Designing of Sampling Plan Using Area of OC curve
- Designing of Quality Interval Acceptance Sampling Plan through Fuzzy parameter.

A new procedure for implementing Fuzzy logic in Quality Interval based Acceptance sampling plan has also been carried out. Practical applications for acceptance sampling is also studied through various case studies. The scope of this thesis is purely based on a new methodology promoted for designing sampling plan based on range of quality instead of point-wise description of quality levels. So this method can be adopted in the elementary production process where the stipulated quality level is advisable to fix at a later stage.

Therefore Quality Interval Sampling (QIS) plan possesses wider potential applicability in industry ensuring higher standard of quality attainment for product or process. Thus Quality Interval Sampling (QIS) plan is a good measure for defining quality and designing any acceptance sampling plan which are ready made use to industrial shop-floor situations.