Paper 2.10: Advanced Statistical Analysis

Unit-1

Moments and Kurtosis, Probability including mathematical expectations, Bayesian Approach. Interpretation of Statistical Data: meaning, errors of interpretation and precautions

Unit-II

Interpolation and Extrapolation, Vital Statistics: Meaning, Measurement of Mortality, fertility and population growth

Unit-III

Non-parametric tests: Sign test, Run test, Signed Rank Test, Kruskal Wallis Test, Median Test, Kolmogorov-Smirnov Test, Mann-Whitney U Test, Kendall's Coefficient of concordance.

Unit-IV

Statistical Decision Theory and Statistical Quality Control

Unit-V

Partial and Multiple Correlation and Regression, Issues in Regession: Multicollinearity, Heteroscedasticity and Autocorrelation.

Suggested Readings:

Gujarati, Damodar N & Sangeetha: Basic Econometrics, Tata McGraw Hill
Gupta, S.P.:Statistical Methods, Sultan Chand & Sons, New Delhi
Gupta, B.N. : Business Statisitcs, S.B.P.D. Publicationm, Agra
Hooda, R.P. – Statistics for Business and Economics, Vikas Publishing
Nagar K.N. **: lkaf[;dh ds ewy rRo** Meenaskhi Prakashan, Meerut
Sancheti and Kapoor: Statistics (Theory,Methods & Application), Sultan Chand & Sons