Paper 1.3 – Advanced Statistical Analysis

Unit-1

Moments and Kurtosis.

Probability: mathematical expectations, Bayesian Approach.

Theoretical Frequency Distribution: Binomial, Poisson, Normal,

Unit-II

Tests of significance: Z test, t test, Chi-square test, 'F' test and ANOVA (One way and Two way)

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,

Partial and Multiple correlation and regression

Unit-V

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. : सांख्यिकी के मूल तत्व Meenaskhi Prakashan, Meerut
Sancheti and Kapoor: Statistics (Theory,Methods & Application), Sultan Chand & Sons