

MT-231 Statistical Inference

Sampling and Sampling Distribution:

Introduction, population, parameter & statistic, objects of sampling, sampling distribution of mean, standard errors, sampling & non-sampling errors, random and non-random sampling, sampling with & without replacement, central limit theorem, related problems.

Statistical Inference and Testing of Hypothesis:

Introduction, estimation, types of estimates, point estimation, Interval estimation, tests of hypothesis, one tails & two tails tests, tests concerning means, proportions & variances, Chi-square tests, related problems.

Regression and Correlation:

Introduction, scatter diagrams, correlation & its coefficient, rank correlation & its coefficient, simple and multiple linear regressions, nonlinear regression, test of significance, related problems.

Time series:

Introduction, components of time series, methods, finding secular trend by the principle of least square methods, related problems.