

Subject Code: 402

Subject Name: Statistical Methods – II

Unit I: Theory of Probability

10Hrs.

Definition of probability, conditional probability,
Independent and dependent events, mutually exclusive events.

Unit II: Random Variable, Probability Distribution and Mathematical Expectation

10Hrs.

Variables and attributes, random variable, probability distribution of a discrete random variable, probability distribution of a continuous random variable mathematical expectation.

Unit III: Theoretical Distributions

10Hrs.

Binomial Distribution: probability function of Binomial Distribution, constants, mean and variance
Normal Distribution: Equation of normal probability curve, standard normal distribution, area under standard normal probability curve, importance of normal distribution.

Unit IV: Parametric test on average – z and t test

10Hrs.

Unit V: Chi – Square Test

10Hrs.

Introduction, Chi – square distribution, applications of chi – square distribution, chi – square test of goodness to fit, conditions for the validity of chi – square test, chi – square test for independence of attributes, degree of freedom.

Unit VI: ANOVA

10Hrs.

Introduction, analysis of variance, one – way classification.

Books:

1. Statistical Methods by S. P. Gupta
2. Statistics for Management by Richard Levin

3. A Textbook of Statistical Methods by Dr. V. R. Parag
4. Business Statistics by S. C. Gupta and Indra Gupta