

B.Com. Sem. VIII

Applied Statistics- Syllabus

Unit	Title	Details of Topics
Unit 1	Introduction to Descriptive Statistics	Meaning and definition ; Number as story teller, Methods of descriptive statistics, measures of central tendency, measures of dispersion, which measure of central tendency to use, a quick glance at the distribution: the stem-leaf method, correlation coefficient: Pearson's r , rank correlation coefficient
Unit 2	Probability and hypothesis testing	Objective probability: probability distribution, hypothesis testing and confidence intervals, the chi-square test; subjective probability
Unit 3	Sources of Data and techniques of survey	Primary data: conducting a survey, designing a survey, sampling and sampling errors, choosing sample and sample size, quantification of survey data, reporting survey results; secondary data: sources and uses
Unit 4	Projection techniques: Analysis of historical data	Components of a data series, patterns of time trends, Adjustment methods: seasonal adjustment, trend adjustment; smoothing out fluctuations: projecting by mean, moving average, choice of projection technique
Unit 5	Projection techniques: method of simple and multiple least squares	Least squares method, linear time trend: simple regression model, relevance and significance of estimated coefficients, presentation of estimation results; multiple regression models, changes in trend, forecasting and its problems

Books Recommended :

1. Levin and Rubin, Statistics for Management, TMH publication.
2. Anderson, Sweeney, Williams, Statistics for Business and Economics, Cengage learning, R.M. Leekley, Applied Statistics for Business and Economics, CRC Press
3. McClave, Benson, Sincich, Statistics for Business and Economics, Prentice Hall, Deepak K. Gupta, Analyzing public policy; concepts, tools and techniques, CQpress,
4. G.J Hahn, N. Doganaksoy Role of Statistics in Business and Industry, Wiley