

## V Semester Open Course

### Spread Sheet Calculations and Elementary Data Analysis

**Objective:** To equip the students with the knowledge of spread sheet calculations and elementary Statistical analysis using spread sheet programs.

#### Module I

**Excel Basics:** Introduction to electronic spread sheets, Working with work books, Formula basics, Editing formulas, Writing multiple copies of a formula, Usage of built in functions (Database functions, Lookup and Reference functions, Math and Trigonometry functions, Text functions, Statistical functions), Formatting, saving and printing.

20 hrs

#### Module II

**Charts and Pivot Tables:** Creating charts with chart wizard, Picking and reviewing Chart types (line charts, bar charts, Pie charts, Scatter charts), Modifying charts, saving, printing and Sharing charts, Customizing Charts, Using Pivot table wizard, Modifying Pivot tables, Working with data in pivot tables, Using Pivot tables to create charts, Importing data into a pivot table, Combining Worksheets in pivot tables.

20 hrs

#### Module III

**Descriptive Statistics Using Excel:** Introduction to data analysis tool pack, Frequency distribution and histogram, Computation of summary measures, cross tabulation and pivot tables.

20 hrs

#### Module 1V

**Elementary Statistical analysis using Excel:** Statistical tests concerning means (One sample Z test for mean, One sample t test for mean, Two sample Z test for means, Two sample t test for means, Paired t test), The F test for variance, Correlation Analysis, Simple Regression analysis, Fitting of Trend line.

30hrs

Total 90 hrs

#### Books for Study

1. Stephen L Nelson and Julia Kelly (2001) The complete Reference Office XP, Tata McGraw-Hill

2. Sarma KVS (2001), Statistics Made Simple Do It Yourself on PC, Prentice Hall of India.

### **References**

1. Richard Johnson (2006), Miller & Freund's Probability and Statistics for Engineers.
2. Microsoft Office Online Help