Semester-II - (MN-2A)

Course Title: Data Analysis using spread sheet

Max. Marks: 75 (Mid-Term:15, End-term: 60) ***Credit-3***

Max. Marks: 25 ***Credit-1***

UNIT I

Graphical Representations-Role, historical perspective, terminology, types of class interval-inclusive, exclusive, Formula to generate class intervals, types of graphs-Histogram,frequency curve, frequency polygon, pie chart, Ogive-more than and less than, Box plot,stem-leaf.

UNIT II

Measures of Central tendency-Arithmetic Mean, Harmonic Mean, Geometric Mean,Median and Mode explanation with example, Measures of Dispersion-Range, Semi Interquartile Range, Standard Deviation, Mean Deviation and explanation with example.

UNIT III

Curve Fitting - Principle of least squares Method, fitting of various curves like Straight line, Second degree Polynomial, kth degree Polynomial and exponential curves,Plotting of various probability distribution like Binomial, Poisson, Normal Distribution with suitable example.

UNIT IV

Introduction to Correlation Analysis, role, uses, its properties and formula, Introduction to Regression Analysis, role, uses, properties of its coefficient and formula to calculate regression coefficient, Regression Line, explain with example.

SUGGESTED READING:

1. Artymiak, J. (2011). Beginning Open Office Calc: From Setting Up Simple Spreadsheets to Business Forecasting. Apress Publisher.
2. Billo, E. J. (2007). Excel for Scientists and Engineers Numerical Methods. John Wiley & Sons.
3. Carlberg, C. (2011). Statistical Analysis. Pearsons Education Inc.
4. Held, B. (2007). Microsoft Excel Functions and Formulas. Wordware Publishing, Inc.
5. Kanji, G.K. (2006). 100 Statistical Tests (3rd ed.). Sage Publication.
6. Remenyi, D., Onofrei, G. and English, J. (2011). An Introduction to Statistics using Microsoft Excel. Academic Publishing Limited.