# Essentials Statistics for Physics For B.Sc. (Physics) Students

#### **UNIT-I:** Basics of Statistics

Collection of data – Classification of data – Tabulation – Presentation – Simple Bar & Multiple Bar charts, Pie chart, Histogram, Polygon

# **UNIT-II**: Measures of Central Tendency & Dispersion

Mean, Median and Mode - Range, Standard deviation and Variance – un grouped and grouped data with simple problems.

Moments – First four Central & Non- Central – simple problems Skewness & Kurtosis using moments

# **UNIT-III: Correlation & Regression Analysis**

Simple, Rank, Multiple and Partial Correlations – Regression equations

## **UNIT-IV**

Scaling Methods, Errors – Biased & Unbiased errors and its types. Poission and Normal Distribution- def., properties and simple problems.

### **Text Books**

- 1. Fundamentals of Statistics S.C. Srivastava & Sangya Srivastava
- 2. Statistical Analysis: Microsoft Excel 2013 Conard Carlberg

## **Reference Books**

1. Statistical Methods – S.P Gupta