**B.COM.**

**SEMESTER III**

**Business Statistics– I (GE 3)**

**(100 Marks - 60 Lectures)**

**Unit I Data Analysis** **(15 Lectures -24 marks)**

Introduction:Meaning and definition of Statistics,function,scope and limitation of Statistics, Basic Statistical concepts: Population, sample, variate, attribute, parameter and Statistic.

Types of data-Primary and secondary data, Sources and methods of collecting data, classification-univariate frequency distribution and questionnaire design.

Graphs and diagrams-Frequency polygon,frequency curve and ogives, Simple, multiple, subdivided bar diagram, pie chart.

**Unit II Summarisation Measures (24 Lectures -40 marks)**

Measures of Central Tendency: Meaning, objectives and requirement of a good measure of central tendency, Arithmetic Mean,Mode and Median(with & without grouping),Harmonic Mean(ungrouped data), Quartiles, deciles and percentiles.

Measures of Dispersion: Meaning,objectives and requirement of a good measure of dispersion,absolute and relative measure, Range,quartile deviation, mean deviation,standard deviation, Coefficient of range, , Coefficient of quartile deviation, , Coefficient of mean deviation, Coefficient of variation, Skewness- Karl Pearson’s and Bowley’s measure and coefficient of Skewness.

**Unit III Index Numbers (13 Lectures -18 marks)**

Meaning,types, uses and limitations of index numbers, Methods of constructing price and quantity Index numbers by weighted and unweighted methods, Weighted

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aggregative-Laspeyre’s, Paasche’s , Fishers and Value index numbers,Weighted average of price relatives, fixed base,chain base,shifting of base, deflating and splicing of Index numbers, cost of living Index numbers.

**Unit IV Analysis of Time series (8 Lectures -18 marks)**

Components andmodels of Time series, Measurement of trend-semi averages, moving averages, freehand and least square method(linear and non linear).

**References:**

1. Gupta S.P.,*Statistical Methods*, Sultan Chand & sons.
2. Gupta C.B., *Fundamentals of Statistics*, Himalaya Publishing House.
3. Shah, R.J., *Statistical Methods*.
4. Mazumdar Neeta, *Statistical Techniques*, RajhaunsVitaran.