

**JYOTI NIVAS COLLEGE AUTONOMOUS**  
**Programme: B.COM / LSCM/ INTEGRATED B.COM M.COM**  
**QUANTITATIVE ANALYSIS FOR BUSINESS DECISIONS –I**  
**Course Code : 24IIIQA02**

**Semester: III**  
**No. of Hours: 60**

**No. of Credits: 4**

**COURSE OBJECTIVES:**

- On successful completion of the course, the Students will be able to understand the basics of Quantitative analysis.
- Demonstrate the skill of Collecting Quantitative Data and utilizing it for Presentations and analysis.
- Demonstrate the skills to use the tools and techniques of data analysis for Business decisions.
- Understand the development and use of Quantitative Techniques for Business decisions.

**LEARNING OUTCOMES:**

- Enables the students to use the knowledge in decision making.
- Understand the practical application of statistics
- Usage of Index number in day to day life
- Application and usage of graph

**Unit-1: Introduction to Statistics**

**10 hours**

Introduction- Meaning, Functions, Uses and Limitations of Statistics;  
Collection of Data –Sources of Data; Methods of Data Collection; Technique of data collection- Census and Sampling Techniques- Methods of Sampling (Concepts). Difference between statistics and analytics.

**Unit- 2: Classification and Tabulation of Data**

**10 hours**

Classification: Meaning, objectives and methods of classification of data, Tabulation: Meaning, Parts of a Table – Simple problems on Tabulation; Graphical representation of median and mode - Histogram, smoothed frequency curve, frequency polygon and Ogives.

**Unit-3: Measures of Central Tendency**

**14 hours**

Measures of Central Tendency: Calculation of Arithmetic Mean, Median and Mode for Individual, Discrete and Continuous Series- Problems

**Unit- 4: Measures of Dispersion and Skewness**

**14 hours**

Measures of Dispersion: Meaning, Absolute and Relative measures of dispersion – Range, Mean Deviation, Standard Deviation - Problems on the above in Individual, Discrete and Continuous Series.

Measures of Skewness: Meaning of Skewness - Tests of Skewness, Measures of Skewness Calculation of Karl Pearson's Co-efficient of Skewness only- Problems

**Unit- 5: Index Numbers**

**12 hours**

Meaning, Uses, Classification, Construction of Index Numbers; Methods of constructing Index Numbers – Simple Aggregate Method, Simple Average of Price Relatives Method, Weighted Index numbers, Fisher's Ideal Index (including Time and Factor Reversal tests);

## Consumer Price Index –Problems

### **Skill Development Activities:**

- Draw a blank table showing different attributes
- Draw a Pie chart with imaginary figures
- Select 05 components of CPI and collect base year quantity, base year price, and current year price and calculate Consumer Price Index.
- Suggest the best average to be used for the following studies
  - a. Average size of shoes
  - b. Average rainfall per day
  - c. Average wages of employees
  - d. Average share price

### **Books for References:**

1. S P Gupta: Statistical Methods- Sultan Chand, Delhi
2. Dr. B N Gupta: Statistics, Sahitya Bhavan, Agra.
3. R.S Bhardwaj: Business Statistics, Excel Books
4. S C Gupta, Statistical Methods
5. Chikkodi and Sathyaprasad, Quantitative Analysis for Business decisions
6. Sancheti and Kapoor, Statistical Methods and Techniques

**Note: Latest edition of text books maybe used**

