

Part-B

Programme: Bachelor of Commerce in Accounting & Finance (Semester IV)

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
BAF 43	Business Statistics	75

Course Outcomes:

This course aims to equip students with a solid foundation in statistical concepts and data analysis techniques. Students will develop the skills to organize, summarize, and interpret data effectively, as well as apply statistical measures to draw meaningful conclusions and make informed decisions based on data.

Upon successful completion of the "Introduction to Statistics and Data Analysis" course, students will be able to:

1. Differentiate between Descriptive Statistics and Inferential Statistics. Identify various types of data (qualitative and quantitative) and their characteristics. Demonstrate knowledge of methods for data collection, tabulation, and presentation.
2. Construct frequency distributions for given datasets to represent data in an organized manner. Apply central tendency measures (mean, median, and mode) to summarize and interpret data distributions. Comprehend the concept of index numbers and construct index numbers for various purposes.
3. Understand the concept of dispersion and its importance in describing data variability. Compute absolute measures of dispersion (e.g., range) and relative measures (e.g., coefficient of variation). Interpret dispersion measures to assess the spread of data.
4. Define skewness and its significance in data distribution. Identify positively skewed, negatively skewed, and symmetric distributions. Calculate and interpret skewness measures to understand the shape of data distribution.
5. Understand the concept of correlation and its relevance in studying relationships between variables. Apply Karl Pearson's formula to calculate the coefficient of correlation for given datasets. Calculate correlation coefficients for both grouped and ungrouped data to analyze associations.
6. Define probable error as a measure of precision in statistical estimates. Calculate probable error to assess the reliability of statistical data and predictions.

Unit	Contents	No. of periods
I	Introduction: -Statistics as a subject, Descriptive Statistics compared to Inferential Statistics, Types of data, Collection, Tabulation and Presentation of Statistical data.	13
II	2.1 Analysis of Universal Data: Construction of frequency of distribution 2.2 Concept of Central Tendency & their measures, Mean, Median, Mode	13
III	Index Numbers, Construction. of Index Number	13
IV	4.1 Concept of Dispersion, Absolute and Relative measures of dispersion 4.2 Skewness.	13
V	5.1 Co-efficient of Correlation, Karl Pearson's Formula 5.2 Calculation of Co-efficient of Correlation for grouped and ungrouped data 5.3 Probable error.	13
VI	Skill Enhancement Module 6.1 Collecting data and constructing series. 6.2 Analysis of data with data descriptor or finding correlation.	10

Skill Enhancement Module Outcomes: After going through the Skill Enhancement Module, the students will be able to:

- a) Collect relevant data from various sources and organize it into appropriate series or datasets. Apply suitable methods to clean and format the collected data for analysis.
- b) Apply descriptive statistics to analyze and summarize data, including measures of central tendency, dispersion, and graphical representation. Use appropriate techniques to find and interpret the correlation between variables in a dataset.

Reference Books:

1. Hood R.P.: Statistics for Business and Economics: (Publisher : Macmillon, New Delhi)
2. Levin Richard and Devid S. Rubin: Satatistics for Management: (Publisher-Prentice Hall, Delhi)
3. D.N.Elhance.: Fundamentals of Statistics:
4. D.C.Sancheti, V.K.Kapoor: Statistics: Theory, Methods and Application: (Publisher - S.Chand)
5. Dr.Shukla & Sahay: Principles of Statistics: Sahitya Bhavan Publication, Agra
6. Dr. Varsha S. Sukhadeve: Modern Approach to Statistics: By Sugawa Prakashan, Pune 30.
7. S.C.Gupta & V.K.Kapoor : Fundamentals of Applied Statistics, Sultan Chand & Sons, New Delhi.
8. Gupta S.P. : Statistical Methods, Sultan Chand & Sons Pat. Ltd. New Delhi
9. D. N. Elhance, Veena Elhance & B. M. Agrawal, : Fundamentals Of Statistics, Kitab Mahal New Delhi
10. Applied Statistics in Business and Economics: Devid P. Doane, Lori E. Seward & shovan Chowdhary, Mc Graw-Hill Publishing Co. Ltd. New Delhi

