

6th SEMESTER
SKILL ENHANCEMENT COURSE (SEC)

COM617S1: PROBABILITY AND STATISTICS

Credits: 4 (Theory: 2; Practical: 2)
Marks: 60 (Theory: 30; Practical: 30)

Objectives: *To understand the role of statistics in business decision making.*

Part I: Theory: Marks: 30

Unit-I

Nature and Significance of Statistics: Role of statistics: Application of inferential statistics in managerial decision making; Measures of central tendency: mean, median and mode and their implications; Measures of Dispersion: Range, Skewness, Standard deviation and mean deviation.

Unit-II

Correlation and Regression: Correlation and Regression: Meaning and uses; Various methods of calculation of coefficients and their analysis and implication; Two variable and multi variable cases. **Probability:** Concept of probability and its uses in business decision making; Addition and multiplication theorem of probability; Bayesian analysis, and its application.

Part II: Practical/Tutorials: 30 Marks

Unit-III & Unit-IV

1. Displaying graphical representation of data and its interpretation.
2. Generation of raw data from business establishments for computation of measures of central tendency and dispersion.
3. Generation of raw data from business establishments for computation of correlation and regression analysis and its interpretation.
4. Solving probability based business related practical problems.

Suggested Readings:

1. Beri, *Statistics for Management*, Tata McGraw Hill.
2. Render and Stair Jr, *Quantitative Analysis for Management*, Prentice Hall, 7th edition.
3. Sharma J K, *Business Statistics*, Pearson Education.
4. Gupta C B, *An Introduction to Statistical Methods*, Vikas.
5. Levin Rubin, *Statistics for Management*, Pearson, New 'Delhi.