

COC102 Business Statistics [4 Credits]

Learning Objective: At the end of the course work, students will be in a position to identify the research gap, develop objectives, formulate hypotheses, gather required data, successfully complete the data analysis, and prepare a research report. During the course of study, students will be familiarized with the statistical software used for data analysis. Every student should be able to understand the reasons for not resorting to plagiarism.

UNIT 1: Introduction to Research**(5 hours)**

Introduction to Research – Meaning, scope, and importance of research – Types of research – The Process of research – Importance of literature review – Identification of research gap – Formulation of research problem and development of the research hypotheses – Research design.

UNIT 2: Introduction to Data Management**(5 hours)**

Identification and Managing Data – Primary and secondary data – Primary and secondary data collection methods – Qualitative and quantitative data – Attitude measurement and scaling – Questionnaire designing.

UNIT 3: Sampling Theory**(5 Hours)**

Sampling Theory and Data Collection – Population and sample study – Sampling theory – Sampling considerations – Sample design and choice of sampling techniques – Sample size – Sampling and non-sampling errors – Data processing.

UNIT 4: Data Analysis**(20 Hours)**

Data Analysis – Measures used for organizing the data (Tabulation and Graphs) – Measures used for describing the data (central tendency, dispersion, skewness, and kurtosis) – Measures used for analysis the relation and prediction (correlation, regression, and time series) – Measures used for testing the data (parametric and non-parametric tests) [Theory and Practical Problems]

UNIT 5: Report Writing**(15 Hours)**

Reporting Research Results – Meaning of plagiarism – How to prevent plagiarism – Types of reports – Planning report writing – Research report format – Principles of writing – Documentation: Foot notes and Bibliography – Writing the report – Typing the report – Briefing – Evaluation of research report.

Suggested Readings:

1. Chawla, Deepak and Sondhi, Neena. *Research Methodology: Concepts and Cases*. Vikas Publishing House Private Ltd.
2. Cooper, Donald R and Schindler, Pamela S, *Business Research Methods*, Tata McGraw Hill.
3. Krishnaswami, O. R and Ranganathan. M. *Methodology of Research in Social Sciences*. Himalaya Publishing house.
4. Gupta, S.C. *Fundamentals of Statistics*. Himalaya Publishing House.
5. Aizel, Amir D & Sounderpandian, Jayavel. *Complete Business Statistics*, Tata McGraw Hill.