## Department of Commerce MCom (HRD)

CRS505: BUSINESS RESEARCH METHODS

Workload: 3 hours Lecture and 2 hours Tutorial per week: Total 4 Credits

Objective: The course is envisaged to provide the students with the knowledge and skill related to conduct of research related to business and familiarise the students with the technicalities of executing a research assignment.

## **Course Out Comes:**

- 1. Enables the students to understand the techniques of doing research in the field of business.
- 2. Equips the students with skills of conducting business research.

Unit -1: Introduction: Meaning of Business Research, Scope of Business Research, Types of Business Research, Theory Building, An Overview of Research Process, Problem Definition and Discovery, Exploratory Research: Secondary Data; Experience Survey; Pilot testing and Pretesting, Research Questions, Research Objectives, The Design of Research: Design Strategies; Sampling Design (Research Population, Sampling, Steps in Sampling Design, Sampling Frame, Sample Size, Probability and Non-probability Sampling Techniques); Measurement and Attitude Scaling, The Sources and Collection of Data: Secondary Data; Observation; Survey; Questionnaires and Interview Schedules, Analysis and Presentation of Data: Descriptive Analysis; Choosing the Appropriate Statistical Technique; Univariate Statistical Analysis (Concept only); Bivariate Analysis (Concept only); Multivariate Analysis (Concept only); Interpretation; The Research Report (Meaning only).

Unit -2: Regression and Correlation Analysis: Meaning of Regression Analysis, Linear and Non-Linear Regression, Regression Equation, Lines of Regression, Estimation Using the Regression Line, The Standard Error of Estimate, Multiple Regression Analysis, Meaning of Correlation Analysis, Significance of the Study of Correlation, Correlation Versus Causation, Types of Correlation, Methods of Studying Correlation: Scatter Diagram Method; Graphic Method; Karl Pearson's Coefficient of Correlation; Correlation of Grouped Data; Least Squares Method of Studying Correlation; Rank Correlation Coefficient, Probable Error of Correlation Coefficient and Interpreting Coefficient of Correlation, Multiple Correlation Analysis, Coefficient of Determination, Correlation Versus Regression.

Unit -3: Sampling Theory and Statistical Inference: Sampling Theory, The Two Concepts: Parameter and Statistic, Objects of Sampling Theory, Sampling Distribution, The Concept of Standard Error(SE), Point Estimation and Internal Estimation, Ordinary Least Squares (OLS) Method of Estimation, Hypothesis Testing Procedure, Null Hypothesis and Alternative

Hypothesis, The Two Mutually Complementary Approaches for Hypothesis Testing: Confidence Interval and Test of Significance, Type I and Type II Errors, Two-tailed and Onetailed Tests of Hypothesis, Sampling of Attributes and Tests of Hypothesis for Attributes, Tests of Hypothesis in respect of Samples Concerning Statistics of Variables (Large Samples), Tests of Hypothesis in respect of Samples Concerning Statistics of Variables (Small Samples): The T-Test; Z-Test, The F-Test and Analysis of Variance (ANOVA): Oneway and Two-way Classifications.

Unit -4: Non-Parametric Tests: Meaning of Non-Parametric Tests, Advantage of Non-Parametric Tests, The Chi-square  $(X^2)$  Test, The Sign Test, The Mann-Whitney U Test (in case of Large Sample only), the Kruskal – Wallis H Test (in case of Large Sample only), the Runs Test for Randomness (in case of Large Sample only), The Wilcoxon Matched Pairs Signed – Ranks Test (in case of Large Sample only).

**Unit -5: The Research Report:** The Importance of the Report, Types of Written Research Report, Written Research Report Components, Considerations in the Report-writing Process, Oral Presentation and Considerations in Oral Presentations.

## **References:**

- 1. Cooper D R and Schindler P.S: Business Research Methods (New Delhi: TATA McGraw Hill)
- 2. Gupta S C: Fundamentals of Statistics (Mumbai: Himalaya Publishing House)
- 3. Gupta S P: Statistical Methods (New Delhi: Sultan Chand and Sons)
- 4. Gujarati D N, Porter D C and Gunasekar S: Basic Econometrics (New Delhi: TATA McGraw- Hill)
- 5. Israel D: Data Analysis in Business Research: A Step-by-step Nonparametric Approach (New Delhi: Response)
- 6. Kothari C R: Quantitative Techniques (New Delhi: Vikas Publishing)
- 7. Kothari C R: Research Methodology: Methods and Techniques (New Delhi: New Age International Publishers)
- 8. Levin R I and Rubin D S: Statistics for Management (New Delhi: Prentice Hall of India)
- 9. Siegel S: Nonparametric Statistics for the Behavioral Sciences (New Delhi: McGraw Hill Kogakusha Ltd.)
- 10. Zikmund W.G: Business Research Methods (Chicago: The Dryden Press)