Faculty of Business Studies
(Commerce)
Syllabus
For
Ph.D. Course Work in Commerce
**Objective:** To introduce the students Research Methodology with Computer Application for analysis and interpretation of data for research report.

**Unit 1: Research Methodology**  
(Credits 03)

**Introduction:**
Meaning of research, Objectives of research, Significance of research, Types of research, Research methods v/s Research methodology, Research process: An overview, Criteria of good research

**Problem Identification, Sampling and Research Proposal:**
Defining the research problem, Technique involve in defining problem, What is sampling?, Types of sample design, Selecting an appropriate sample, How to select a Random Sample?, Research proposal

**Research Design:** Meaning of research design, Need for research design, Features of a good design, Important concepts relating to research design, Different research design, Basic principles of experimental designs

**Data Collection:** Collection of Primary Data, Difference between Questionnaires and Schedules, Selection of appropriate method for data collection, Data measurement scale reliability & validity, Collection of secondary data: Sources, Advantages & Limitations

**Processing and Data Analysis:** Processing Operations, Some Problems in processing, Elements / Types of Analysis, Statistics in research, descriptive analysis, Central tendency, Dispersion.

**Hypothesis Testing:** What is a Hypothesis?, Basic concepts concerning testing of Hypotheses, Procedure for hypothesis testing, Flow diagram for hypothesis testing, Measuring the power of a hypothesis test, Important parametric tests and non-parametric tests, Use of Statistical Package for the Social Sciences (SPSS)- data file, data coding, enter data, computing, analysis function of SPSS and MS EXCEL, Characteristics of non-parametric tests, Limitations of hypothesis testing

**Analysis of Variance (ANOVA):** What is ANOVA? The basic principle of ANOVA, ANOVA techniques, Short-cut method for one way ANOVA, Two way ANOVA

**Research Report:** Significance of research report, Layout of research report, Types of research report, Oral presentation, Synopsis of Research Report, Role of computer in research
Unit 2: Review of Literature (Credits 03)

- Detailed review of literature in the subject and research topic.

Unit 3: Computer Application in Research (Credits 03)

Introduction to Computer

MS Word

MS Excel
Introduction to MS Excel- Working with Excel Sheet- Inserting Data in Worksheet- Editing Worksheet- Wrap Text- Formulas and Function- Entering Formula- Cell Reference- Rang Name- MS Excel Function- Using Common Function- Ceiling, round, average, max, simple if- Formatting and Printing Worksheet- Remaining worksheet- Copying worksheet- Inserting worksheet- Moving worksheet- Deleting worksheet- Formatting Cells- Filtering Data- Auto Filter- Sorting Data- Chart in MS Excel- Creating a Basic Chart
**MS Power Point**


**References:**
