

Ph.D. Course Work Syllabus

Paper – 1st Research Methodology

(101)

Unit I

Introduction: Definition of Research, Qualities of Researcher, Components of Research Problem, Various Steps in Scientific Research, Types of Research; Hypotheses Research Purposes - Research Design - Survey Research - Case Study Research.

Unit II

Data Collection: - Sources of Data: Primary Data, Secondary Data; Procedure Questionnaire - Sampling Merits and Demerits - Experiments - Kinds - Procedure; Control Observation - Merits - Demerits - Kinds - Procedure - Sampling Errors - Type-I Error - Type-II Error.

Unit III

Research Reports: Structure and Components of Research Report, Types of Report, Good Research Report, Pictures and Graphs.

Unit IV

Quantitative Methods : Meaning and definition of quantitative method, Arranging data to convey meaning – Tables, Graphs and Frequency, Distribution, Measures of Central Tendency and Dispersion, Simple and Multiple regression and correlation, Association of Attributes, Probability – probability Distributions, Binomial, Poisson and Normal, Linear Programming - Formulation and Graphical solution to two, variables – Assignment Problems, Transportation problems, Queuing Theory – Single Server And Multi-Server

Unit V

Markov chains with Simulation Techniques – Monte Carlo Simulation, Game theory – 2x2 zero sum game with dominance – pure strategy and mixed strategy, Decision Theory – 5 criteria of decision making, Chi-square, Discriminant Analysis, Factor Analysis, Cluster Analysis, Multidimensional Scaling, ‘T’ Test, ‘F’ Test, ‘Z’ Test

Paper- 2nd Computer Application

(102)

Unit I

Introduction : Classification of computers, computer memory, types of software's: application of system software's operating systems and types, single user, multi user, multi-tasking single tasking, application of computer for business and research.

Unit II

Data Communication and networks : Data communication concepts, local area network, wide area network, internet, intranet, extranet, website. Email, search engines-enterprise E communication and E collaboration

Unit III

MS Office and its application : File handling in window, various versions of MS Office, M S-Word: Text formatting, Mail merge, Macro, M S-Excel: Features, various formulas and functions M.S. Power Point: Creating presentations and adding effects.

Unit IV

SPSS : Introduction to SPSS: Definition, objectives and features, data analysis using SPSS: Data entry creating variables, switching to data labels, data analysis: Frequencies, recording into different variables, cross tabulations and layers.

Unit V

Application of Internet in research : INFLIBNET, Use of Internet, sights (DOAJ), Use of E Journals, Use of E library, use of EBSCO HOST online database of Academic Libraries.

Paper – 3rd
Review of Research Work

(103)

Unit I

Examining the methods of evaluating and interpreting published Research, Developing skills needed to research available literature for information relevant to a given topic, Exploring the principles and techniques of topic/project development and testing.

Unit II

Examining the methods of evaluating and interpreting data collected in the research process, Developing an understanding of the various statistical methods that can be used to analyze data.

Unit III

Demonstrating the ability to use statistical analysis tools and apply them in decision making activities, Demonstrating the ability to create a template document that can be used to complete your research project or thesis.

Unit IV

Paper writing and report generation : Basic concept of Paper / Thesis writing and report generation, writing Research Abstract, Introduction, review of literature, Result, Conclusion, Concepts of Bibliography and References; significance of report writing, steps of report writing, Types of Research reports. Methods of presentation of report. Formats of publication in research general.

Study Plan:

The course work classes are mandatory to attend.

The assignment should be submitted time to time.

Evaluation examinations will be held in the end of course work.