



SUNRISE UNIVERSITY ALWAR

SYLLABUS OF Ph.D COURSE WORK

1. Research Methodology & Quantitative Methods
2. Computer Applications
3. Advanced Course (Own Discipline)

*Assignment of each Paper will carry 40 Marks-

(A) Two Questions will carry 10 marks for each question.

(B) Four Questions will carry 5 Marks for each question.

*Course work written exam will carry 60 Marks for each paper.

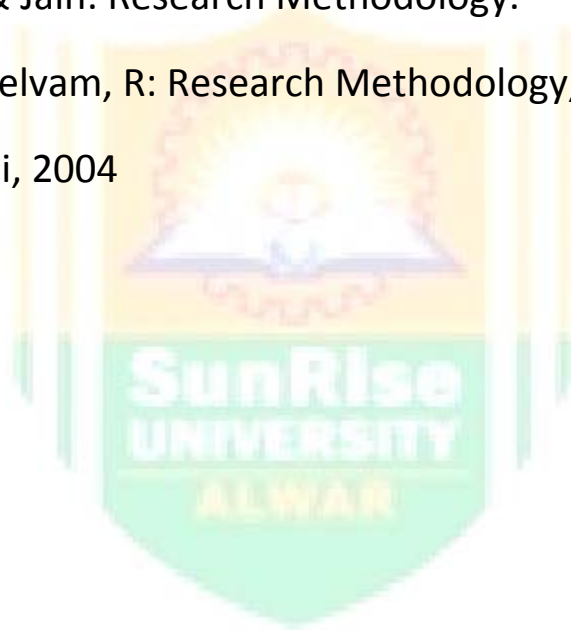
Paper 1: Research Methodology & Quantitative Methods

- Introduction: Definition of the Research, Qualities of Research, Components of Research Problems, Various Steps in Scientific Research, Types of Research; Hypotheses Research Purposes- Research Design-Survey Research-Case Study Research.
- 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 and Type-II Error.
- Statistical Analysis: Introduction to Statistics, Probability Theory, Conditional Probability, Poisson Distribution, Binomial Distribution and Normal Distribution, Point and Interval Estimates of Means and Proportions, Test of Hypothesis, One Sample Test, Two Sample Test, Chi-Square Test, Association Attributes, t-Test f-Test, z-Test, Standard Deviation, Co-efficient of variations, Index Number, Time Series Analysis, Decision Tree.
- Statistical Applications: Correlation and Regression Analysis, Analysis of Variance, Completely Randomized Design, Randomized Complete Block Design, Latin Square Design, Partial and Multiple Correlation, Discriminate Analysis, Cluster Analysis, Factor Analysis and Conjoint Analysis, Multifactor Evaluation, Two-factor Evaluation Approaches.

- Research Reports: Structure and Components of Research Report , Types of Report, Good Research Report, Pictures and Graphs, Introduction to SPSS.
- Meaning and Definition of Quantitative Methods, Arranging data to convey meaning: Tables, Graphs and Frequency Distribution, Measures of Central Tendency and Dispersion.

Books:

1. Kothari & Jain: Research Methodology.
2. Panneerselvam, R: Research Methodology, PHI,
New Delhi, 2004



Paper-2: Computer Applications

- Basics of Computer and Types of Computer.
- Introduction : Classification of computers, computer memory, types of software, application of system, software operating systems and its types, single user, multi user, Real Time processing, multi-tasking, single-tasking, application of computers for business and Research , E-Commerce, M-Commerce and its applications.
- 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.
- MS-Office and its Application, File Handling in Window, various versions of MS-Office:- MS-Word: Test formatting , Mail merge, Macro, MS-Excel: Features , various formulas and functions, MS-Power Point: Creating presentation and adding effects.
- 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.
- Application of Internet in Research INFLIBNET, Use of Internet, SIGHT(DOAJ), Use of E-Journals, Use of E-library, Use of EBSCO HOST, Online database of Academic libraries.

Books:

1. **INTRODUCTION TO COMPUTER AND ITS APPLICATIONS:** By [Dr.K.Dhanasekaran](#), Manikandan Palanisamy
2. Step by Step Computer Applications
By John Roche

Paper3: Advanced Course (Own Discipline)

- Examining the methods of evaluating and interpreting published research.
- Developing skills needed to research available literature for information relevant to given topic.
- Exploring the principles and techniques of topic/project development and testing.
- Examining the methods of evaluating and interpreting data collected in the research process.
- Writing review on the research paper of own subject/topic.
- Demonstrating the ability to create a template document that can be used to complete your research project or thesis.

