Annexuse - III a

2 Prolitory

## COURSEWORK SYLLABUS

## RESEARCH METHODOLOGY & COMPUTER APPLICATIONS

**Total Credits: 06** 

M. M.: 100

**Total Hours: 60** 

Unit-I Introduction

(10 Hours)

Meaning, Concept, Nature, Steps, Types and Characteristics of research.

Scientific Inquiry

Philosophical and Sociological foundations of research

Interdisciplinary approach and its implications in various research area.

(10 Hours)

Unit-II Methods of Research

Qualitative and quantitative methods of research like Historical, case study, ethnography, exposit facto, documentary and content analysis, survey (Normative, descriptive, evaluative etc.) field and laboratory experimental studies.

Characteristics of methods and their implications in research area.

(10 Hours)

Unit-III Development of research proposal

Research proposal and its elements

Formulation of research problem-criteria of sources and definition

Development of objectives and characteristics of objectives.

Development hypotheses and applications.

Unit-IV Methods of data collection & Methods of data analysis

(10 Hours)

Part I- Methods of data collection

Concept of sampling and other concepts related to sampling. Probability and non-probability samples, their characteristics and implications.

Tools of data collections, their types, attributes and uses.

Redesigning, research tools-like questionnaire, opinionnaire, observation,

interviews, scales and tests etc.

Part II- Methods of data analysis

Analysis of qualitative data based on various tools.

Analysis of quantitative data and it presentation with tables, graphs etc.

Statistical tools and techniques of data analysis-measures of central tendency,

dispersion.

Decision making with hypothesis testing through parametric and non-parametric tests. Validity and delimitations of research findings.

Unit-V Report writing and evaluations

(10 Hours)

Principles of report writing and guide lines according to style manuals.

Writing and presentation of preliminary, main body and reference section of report.

Picture and Graphs. Introduction to SPSS.

Evaluation of research report.

Unit-VI Computer Applications

(10 Hours)

Basic Knowledge of Computer, Introduction to SPSS or any other software applied to research; Evaluation of Research Report; Use of Internet for Research Purpose: Research publishing tool-MS Word, Adobe acrobat. Application of Internet in research: INFLIBNET, Use of E-Journals, Use of E-

2/0eng 12/23

## References:

- 1. Wilkinson & Bhandarkar: Methodology and Techniques of Social Research.
- 2. Pauline Vyoung: Scientific Social Surveys and Research.
- 3. Panneerselvam, R., Research Methodology, Prentice Hall Of India, New Delhi, 2004
- 4. Kothari: Research Methodology.
- 5. Festinger. L & D. Katz: Research Methods in Behavioral Science.
- 6. Sellitz, Et Al: Research Methods in Social Relations.
- 7. Sanders, D.H., Computer Today, NY: McGraw Hill, 1981.
- 8. Sinha, P.K., Computer Fundamentals, New Delhi: BPB Publications, 1992.
- 9. Cox, J. And Urban, P. "Quick Course in Microsoft Office. Galgotia Publications, New Delhi, 1990.
- 10. Jain, Satish: "Introduction to Computer Science and basic Programming." BPB Publications, New Delhi, 1990.
- 11. Rajaraman, V., "Fundamental of Computers", Prentice Hall of India, New Delhi, 1996.
- 12. Saxena, S., "A First Course in Computers", Vikas Publishing House Pvt. Ltd., New Delhi, 1998.

Sleeme-30/12/23