MOTHER TERESA WOMEN'S UNIVERSITY KODAIKANAL

COURSE WORK EXAMINATION: RESEARCH METHODOLOGY

Education, Guidance & Counseling & Psychology

Objectives:

- To orient students towards research in the field of education
- To orient students towards Ethical aspects of the Research.
- To develop computational skills in educational statistics
- To orient students in the application of statistical findings
- To inculcate skill of construction of tests and tools for data collection
- To enable the students interpret educational research findings
- To orient Feminist Methodology in Research

I Introduction

Scope and need for education problems faced in educational research differences between research in social sciences and Physical and Natural Sciences – Types of Research, Basic, Applied and Action Research, Strategies to approach them – Qualities of a research Worker. Introduction to Research Ethics, Objectives of Research Ethics, Ethics in Writing- Importance of Research Ethics, Principles of Research in Ethics.

II Major Steps in Research

Web based Resources for Research – define a research problem. Sources for research problem – study of related literature – criteria for selecting a problem statement of the research problem – determining feasibility of the study – Hypothesis; meaning, types and formulation – Types of sampling procedure – criteria for a selection of sample – Research proposal: The need and format – collection of data; organizing and analyzing the data

III Research Methods

Historical – normative survey, Experimental – exploratory and descriptive – case study – generic method : Cross sectional and longitudinal – Analytic and comparative studies – Content Analysis- Narrative analysis – Research Methodology for Feminist studies – Inter Disciplinary Research

IV Selection of Tools

Criteria for selection of tools – Factors related to construction of a tool – Tools and Techniques – observation, interview. Questionnaire, check list, rating scale, attitude scale (Thurstone method and Likert method) – Achievement test – Diagnostic test and prognostic test- characteristics of research tools – validity

and prognostic test – characteristics of research tools – validity and objectivity – standardization of tests and general procedure for them.

V Source Materials

Source materials – Primary sources, secondary sources, problem of credibility of external criticism and of internal criticism

VI Research Reporting

Organization of data – synopsis – Graphical and Statistical representation – Language and style of presentation – chapterisation – Indexing – Footnote – Bibliography – Appendix – Format modification for short report – Book Review, style manual, typing, heading, pagination, tables

VII Statistics Analysis of Data

The significance of statistical measures – concept of standard error and its uses – Testing of difference between two means test for small large samples Elementary ideas about F Test t – one way analysis of variance.

Two way analysis of variance interaction effect – non-parametric statistics – multivariate analysis. Multiple regression analysis; Factor Analysis , path analysis – (Basic principles and use and interpretation of results only, not the computations as such) use of statistical package. Analysis of qualitative data, grouping classification.

Reference Books

- Van Dalen, D. Understanding Educational Research, New York, McGrew Hill Co., 1973
- 2. Travers, Robert M.W., Introduction to Educational Research, New York, Macmillan co., 1964
- 3. Guilford J.P. Fundamental Statistics Psychology and Education, New York, McGraw Hill; Booth Co., 1965
- 4. Garett Henry V. Statistics in Psychology and Education, Vakis, Kelfer and Sons Pvt.Ltd., Bombay
- 5. Fred N.Kerlinger, Foundations of behavior research, Surjeet Publications, 1983
- 6. Kothari C.R., Research Methodology, Willy Eastern Limited, New Delhi.