

**DEPARTMENT OF TEACHER EDUCATION
SYLLABUS FOR M.Phil**

M.Phil-DTE-I

Course-I (Compulsory): Research Methodology and Statistics

Objectives:

- ❖ To orient students towards research in the field of education.
- ❖ To orient students in the application of statistical findings
- ❖ To enable the students interpret educational research findings

Unit-I: Introduction to Research Methods

- Meaning and importance of Research in Education
- Types of Research
- Criteria of a good research.
- Review of Related Literature

Unit-II: Methods of Research

- Quantitative Research: Research designs: true experimental (single group pre-test, post-test design; two-group experimental-control group design; Solomon fourgroup design, rotational group design; factorial design), quasi-experimental designs, internal and external validity of the research designs
- Qualitative Research: meaning, nature, characteristics, scope and relevance, types of qualitative research

Unit -III: Sampling, Tools& Techniques in Research

- Concept of population and sample, sampling unit, representativeness of a sample, sampling frame, Sampling methods: meaning, nature, conditions and applicability of Probability Sampling (Simple Random Sampling, Stratified Random Sampling, Systematic Sampling, Cluster sampling, Multi-Stage Sampling) and NonProbability Sampling (Incidental Sampling, Quota Sampling, Purposive Sampling and judgmental sampling, Snowball sampling).
- Tools and techniques – observation, interview, inquiry forms, scaling techniques, rating scale, attitude scale, psychological tests and projective techniques, sociometry – development and standardization of research tools, Characteristics of the tools: item analysis, reliability, validity and usability

UNIT – IV: Data Analysis

- The significance of Statistical Measures – Parametric and Non-Parametric Data – Descriptive and Inferential Analysis – Measures of Central Tendencies – Normal Distribution – Measures of Relationship: Pearson’s Product –Moment Co-efficient of Correlation - Concept of Standard Error and its Uses – Testing of Difference between Two –Mean Test for Small, Large Samples Elementary Ideas about F Test – One way Analysis of Variance – Two Way Analysis - Multivariate Analysis – Multiple Regression Analysis; Factor Analysis.

References

- Anpara, Vincent & Mertz Norma T. (2006). Theoretical Frameworks in Qualitative Research. New Delhi: SAGE Publication.
- Best J.W. (1986). Research in Education, New Delhi: Prentice Hall of India Pvt. Ltd.
- Borg, W.R. and Gall, M.D. (1983). Educational Research – An Introduction, New York: Longman, Inc.
- Clive Opie. (2004). Doing Educational Research- A Guide for First time researchers. New Delhi: Vistar Publications.
- Cohen, L., Lawrence, M. and Keith, M. (2007). Research Methods in Education. Routledge, London.
- Edwards (1973). Statistical Methods for Behavioural Sciences, New York: Holt, Rinehart and Winston.
- Grbich, Carol (2006). Qualitative Data Analysis: An Introduction. SAGE Publication.
- Lichtman, Marilyn (2006). Qualitative Research in Education-A User Guide.SAGE Publication.
- Good, Carter, V. Methodology of Educational Research, New York: Appleton Century Crafts.
- Elliott, Jane (2005).Using Narrative in Social Research: Qualitative and Quantitative Approaches. SAGE Publication.
- Fraenkel, J.R., Wallen, N.E. (1983). How to Design and Evaluate Research in Education. Singapore: McGraw Hill, Inc.
- Jill Porter & Penny Lacey (2005). Researching Learning Difficulties- A Guide for Practitioners. Paul Chapman Publishing.
- Scott, David & Usher, Robin (1996). Understanding Educational Research. Rout

M.Phil-DTE-II
Course-II (Compulsory): Measurement and Evaluation in Education

Objectives:

To enable students:

- ❖ To understand the meaning, trends and functions of measurement & evaluation.
- ❖ To relate educational objectives with evaluation.
- ❖ To understand the interpretation of test scores.
- ❖ To plan, prepare and administer researcher made test.
- ❖ To use appropriate statistical concepts for analysis of test scores
- ❖ To get acquainted with various examination reforms and alternative assessment strategies.
- ❖ To get develop ability to apply theoretical knowledge gained through the course.

UNIT - I: Basics of Measurement and Evaluation

- a) Concepts of measurement and evaluation with reference to process of education.
- b) Functions of measurement and evaluation in education.
- c) Educational Measurement trends.
- d) Types of Evaluation- formal, informal, oral, written, formative, summative.
- e) Relationship between educational objectives, learning experiences and evaluation.

UNIT – II: Nature and administration of tests

- a) Criteria of good test.
- b) Types of tests: Psychological, reference, diagnostic
- c) Steps of construction and administration of researcher made test.
- d) Standardization of test.
- e) Administrative concerns.
- f) Measuring individuals with disabilities.

UNIT – III: Statistical concepts

- a) Test scores and their transformation: Z & T scores, stannine scores, percentiles.
- b) Interpretation of qualitative data.
- c) Correlation analysis
- d) Simple prediction analysis
- e) Item analysis - Basic assumptions, methods
- f) Norms : Age, grade.

UNIT - IV: Examination reforms

- a) Grading, marking and credit system.
- b) Alternative assessment strategies- rubric, performance based assessment.

- c) Question Bank.
- d) Continuous and comprehensive evaluation.
- e) Moderation and revaluation.
- f) Online assessment tools.

References:

- 1 Marshall And Hales, Addison Wesley, Classroom Test Construction (1971) – Publishing Company, London.
- 2 D.C. Dasgupta. Educational Psychology of Ancient Hindus (1949)-
- 3 Thomdike Hegen, John Wiley and Sons Measurement and Evaluation in Psychology and Education -, London, New York.
- 4 Bruce W. Turkman Brace, Jovanovich Measuring Learning, outcomes -
- 5 Frank S. Freeman, Holt Rinehart and Winston, Theory and practices of Psychological Testing - New York.

Areas of Specialization (Any one of the following)

- 1) Secondary Education
- 2) Planning and Management of Education
- 3) Comparative Education
- 4) Teacher Education
- 5) Educational Assessment and Evaluation
- 6) Guidance and Counselling
- 7) Education of Disadvantaged
- 8) Education of Differently Abled Children (Special Education)
- 9) Language Teaching/ Learning
- 10) Mathematics Education
- 11) Science Education
- 12) Educational Psychology
- 13) ICT in Teacher Education
- 14) MOOCS