Ph.D. (Education)

Paper-I-Research Methodology & Computer Application in Research

OBJECTIVES:

- To acquaint the research scholars with the nature, scope and limitations of various methods of conducing educational research.
- To develop an understanding of process of conducting educational research.
- To develop an ability of appropriate selection, development and use of various tools of research
- To acquaint the students with various techniques of sampling and to develop an ability of selecting appropriate sample for a research study.
- To acquaint the students with various experimental design.
- To acquaint the students with the use of various parametric and non-parametric statistics for analysing quantitative data.
- To develop an understanding of various techniques of analysingQualitative data.
- To develop an understanding of the use of computer technology in research

UNIT-1: Research Methods

- i. Experimental & Ex-post facto
- ii. Survey: Normative, co relational, Evaluative
- iii. Ethnographic Ethno methodological
- iv. Grounded Theory
- v. Historical, Philosophical

UNIT-2: Sampling Techniques

- Sampling & Non Sampling Errors
- ii. Selecting Representative Sample
- iii. Probability & Non Probability Techniques

UNIT-3: Tools & Techniques of Research

- Observation & Observation Schedule, Various techniques for preparing observation schedule
- ii. Sociometry: Sociometry Matrix & Sociogram.
- Psychological Tests & Inventories: Selection and Development: Intelligence, Interest & Attitude, Achievement & Attitude, Adjustment
- iv. Questionnaire & Interviews & Writing Field Notes

UNIT-4: Experimental Design

- i. Pre experimental, Quasi experimental and True experimental designs
- ii. Simple Randomized
- iii. Treatment X Subject
- iv. Treatment X Level
- v. Factorial

UNIT -5: Quantitative Data Analysis

- i. Review of Bivariate Regression & Correlational Analysis
- ii. Multivariate Correlational & Regression Analysis
- iii. ANOVA & ANCOVA, Two-way Analysis
- iv. Factor Analysis

UNIT-6: Analysis & Interpretation of Qualitative Data

i. Inductive, Logical Analysis, Content Analysis.

UNIT -7: Use of Computer Technology in Research

- Web as tool for research
- Computer in Testing and data collection
 - Computer aided Psychological Testing: introduction, history, advantages and disadvantages
 - ii) Online surveys
 - iii) Photographic inquiry
- Computer based data management and analysis: New technologies, hopes, fears and fantasies. Examples:
 - i) Spread sheet
 - ii) SPSS
 - iii) Types of Software for Qualitative analysis: atlasti, nvivo
- Reference Management software :uses of
 - i) Mendeley
 - ii) RefWorks
 - iii) Google scholar
- Anti-Plagiarism Tools: Need and importance, examples : Turnitin, ithenticate, Urkund etc

Essential/Suggested Reading:

- Babbie, Earl (2010) The practice of Social Science Research, wadworth cengage learning, Belmont, USA. P. 513
- Blaxter, Loraine; Hughes, Christina and Tight, Malcom(2009) How to Research, Open University, New York. P.204
- Cochran, W.G. & Cochran G.M. Experimental Design Bombay, Asia Publication House 1961
- Cohen, L. Manion & Morrison K. Research Methods in Education, 6th Edn. New York. Routledge-2006
- Creswell, John WResearch Design: Qualitative Quantitative and Mixed Methods Approaches 3rd Edn. New Delhi, Sage Publication, 2008
- 6. Denzin N.K. & Lincoln Y.S Handbook of Qualitative Research, Sage Publication, 2009
- Ferguson G.A(1981). Statistical Analysis in Psychology and Educations Tokyo, McGraw Hill
- Festinger, U and Katz, D (Eds). Research Methods in Behavioural Sciences, New York: Mott, Reinehart and Winston Inc. 1970
- Filstead, W.J. Qualitative Methodology: First hand Involvement with Social World. Chicago, Markham Pub.Co. 1970.
- Flick, Uwe (2006) An introduction to Qualitative Research, 3rd edition, Sage Publication, New Delhi. P.242
- 11. Gregory, Robert J(1992) Psychological Testing, Allyn and Bacon.
- Guilford J.P.& Fruchtger, B.(1978) Fundamental Statistics in Psychology and Education, Mc Graw Hill.
- 13. Kisber, Lynn Butler (2010) Qualitative Enquiry, Sage, New Delhi p.123.
- 14. Patton, M.Q.(1988) Qualitative Methods, Beverly Hills, Sage Publication, 1988.

15. Lindquist, E.F. Designs and Analysis of Experiments in Psychology and Education, Bostion, Houghton Miffin

Web resources:

http://eprints.uni-mysore.ac.in/17107/1/Anti-Plaglarism_Software_-A_tool_to_ensure_quality_research_output.pdf

http://atlasti.com/

http://ceur-ws.org/Vol-706/poster22.pdf

https://explorable.com/online-surveys

http://www.eifl.net/e-resources/urkund-plagiarism-checker

http://www.urkund.com/en/about-urkund

http://www.fno.org/jan97/websearch.html

http://www.qsrinternational.com/nvivo/what-is-nvivo

PhD .Perspective of Education (Paper-II)

Unit I: Philosophy of Education

Objectives

- To acquaint the students with the nature of philosophy knowledge and its relationship with research
- 2. To develop a philosophical framework for analysing Education
- To acquaint students with major philosophical concerns in research in Language/ Social Sciences/ Science education
- 4. To provide an overview of researchers and philosophy of education

Content

- A. Nature and meaning of philosophy, its relationship with research, metaphysics and metaphysical issues in research, nature of knowledge and knowledge construction and Research as a tool for knowledge construction, Values: meaning temporal and external values and ethical issues in research.
- B. Heidegger and his ideas on hermeneutic ontology
- C. Compte and his theory of positivism
- D. Karl Marx and theory of historical and dialectical materialism
- E. Kuhn and history of structure of scientific revolution and determinant and probabilistic nature of laws of nature
- F. Overview of researches in Philosophy of Education

Suggested Reading:

- Cruikshank, J. (2002) Critical Realism and Critical Philosophy, Journal of Critical Realism, 1.1, pp. 49–66.
- 2. J. White: Karl Marx and the Intellectual Origins of Dialectical Materialism, Springer 1996
- 3. Paul Hoyningen- Huene :Reconstructing Scientific Revolutions: Thomas S. Kuhn's

Philosophy of Science, University of Chicago press, 1993

Unit II: Sociology of Education

Objectives

- 1. To reflect and criticize sociological approaches
- 2. To critically analyse various policies and their implementation
- 3. To examine research trends in the field

Content

- A. Evolutionary approach is in the sociology
- B. Dialectic tradition and modernity in Sociology
- C. Complexities of Indian society: critique and transformation
- D. Political sociology in India; Nationalist sociology

Suggested Reading

- Apple M (1986) Teacher and Text: A Political Economy of Class and Gender Relations in Education, New York
- 2. Routledge Durkheim, E (1956) Education and Sociology New York, Free Press

- Weber, M (1977) From Max Weber. Essays in Sociology Trans ed by H.H Girth and C. Wright Mills London
- 4. Rutledge and Kegan Paul Sen, A (2005) The Argumentative Indian, Alle Lane

Unit III: Psychology

- 1. To acquaint the students with relation between development and psychology
- 2. To understand varjous theories of development and their applications
- 3. To acquaint students with the concept and process of development \

Content

- A. Cognitive development of Piaget
- B. Psycho-social system of E. Erikson
- C. Psychoanalytical approach: Freud
- D. Teaching as a profession professional ethics and development of professional identity of teachers

Suggested Reading:

- Woolfo I K A .(2008) Educational Psychology, Pearson 277-313
- 2. Hughes, et.al (1996) Child Development, Prentice Hall America
- 3. Berk, L.E. (2013) Child Development 129 151 Pearson Education, PHI learning

Unit IV: ICT and Education

Objectives

- 1. To get practical experience and reflective engagement on critical issues ICT
- 2. To understand the role of ICT in education in relation to various policies and curriculum frameworks on ICT
- To get a rich learning experience through various ICT tools which will enable them to engage diverse classroom contexts
- 4. To critically assess the quality and efficacy of resources and tools available
- 5. To access and suitably modify open educational resources

ICT and Education

- Meaning, Importance and tools of ICT in teaching learning processes ,research , administration and Policies of ICT
- B. Meaning, Characteristics and use of internet, Introduction to Website: Social Websites (Blogs/Twitter/Facebook/WhatsApp etc.),ICT and Web 2.0 Technology in Research and Education
- C. Understand modes of Web learning (Virtual learning, Blended learning, Virtual classrooms, animations, simulations, virtual tourism, wearable technology, E-content, Visual research MOOCS etc.) &Open Educational Resources
- ICT for assessment of/for learning , ICT for material development; TPACK framework, CT tools in Educational Research

Suggested Readings

- 1. Intel Education, NCTE(2007) Handbook for teacher Educator, Bangalore
- 2. GOI (20012) National Policy on ICTs in School Education, MHRD, Government of India
- 3. E-learning methodology: Perspective on the instructional design for Virtual Classroom, Sarup Publication, New Delhi(2010)