BHARATHIAR UNIVERSITY: COIMBATORE M. Phil. EDUCATION

PART-I-SYLLABUS (From October 2011 batch onwards)

PAPER I- METHODS OF RESEARCH AND STATISTICS IN EDUCATION

Objectives:

- To enhance the knowledge of the scholars in Educational Research Methods and Statistics
- To encourage the scholars in preparing Research Proposals and Research Reports
- To enable the scholars to apply the SPSS Package in Data Analysis
- To understand the need for inter-disciplinary approach to Educational Research

UNIT-I Introduction

- **1.1** Nature of Educational Research-Research Needs in Different Fields of Education-Utility of Research
- 1.2. Aims and Purposes of Educational Research--Uses of Educational Research
- **1.3.** Areas of Educational Research--Problems Related to Teaching and Learning Process
- **1.4.** Research Problems: Selection of Problem--Defining the Problem--Statement of the Problem
- **1.5.** Research Design: Meaning of Research Design--Need for Research Design-Features of Good Research Design

UNIT-II-Review, Sampling Techniques and Instrumentation

- **2.1** Objectives of Review of Related Studies--Identification of the Related Literature-Organizing the Related Literature
- **2.2.** Hypothesis: Types, Formulation of Hypothesis--Ways of Stating the Hypothesis-Testing of Hypothesis
- **2.3.** Sampling and Population: Sampling Techniques-Sampling Size--Sampling Errors-Unavoidable Errors--Constant Errors of Sampling
- **2.4.** Scales: Nomial, Ordinal, Interavel and Ratio--Construction of Tools--Item Analysis
- **2.5.** Establishment of Reliability: Methods of Reliability Tests-- Test-Retest, Split Half and parallel group-- Types and Establishment of Validity: Face, Content, Construct, Concurrent and Factorial

UNIT-III Methods of Educational Research

- **3.1.** Types of Research in Education: Qualitative Research and Quantitative Research
- **3.2.** Experimental Method-Quasi Experimental Method--Factorial Design--Case Study
- **3.3.** Survey Method--Historical Method--Action Research and Longuitinal Research
- **3.4.** Generic Method, Casual Comparative Method, Documentary Analysis, Bibliographical Method, Participatory and Ethnographic Research Methods
- **3.5.** Tools: Observation, Interview Schedule, Checklist, Questionnaire, Achievement Test, Diagnostic Test and Attitude Scale

UNIT-IV Educational Statistics

- **4.1.** Testing the Significance of Difference between two Means, Z-test, Student's t Test, One way and Two way ANOVA & ANCOVA
- **4.2**. Analysis of Post-hoc and Scaffe-Test
- **4.3.** Non-parametric Tests:Chi-square Test, Wilcoxon Rank test, Mann & Whitney U Test
- **4.4.** Bivariate Analysis: Correlational, Biserial, Point Biserial, Tetra Choric, Partial Correlation, Multiple Correlation and Regression
- **4.5.** Factor Analysis, Path Analysis & Cluster Analysis

UNIT-V Computer Application and Interdisciplinary Approach

- **5.1.** Computer Application: Statistical Package for Social Sciences (SPSS)
- **5.2.** Computer Data Processing: Data entry & applying statistical analysis
- **5.3.** Computer Graphs--Preparation of Research Documents
- **5.4.** Preparation of Research Proposal--Writing the Report of Research Studies
- **5.5.** Inter-Disciplinary Approach: Need of Inter-Disciplinary Approach, Problems in Inter-Disciplinary Approach--Process of Inter-Disciplinary Research

Reference Books:

- 1. Kerlinger H Fred (1964). **Foundations of Behavioral Research**, Educational Psychological Inquiry
- 2. Goode & Haft, (1952). **Methods in Social Research**
- 3. Paulin Youong (1961). Scientific Social Survey and Research
- 4. John Best (1975). Fundamentals of Social Survey and Research
- 5. Edwards AL (1966). Experimental Design in Psychology and Education
- 6. Covers. P.S (1980). **Computer Programming in Basic**. Madras: Allied Publication (P) Ltd.

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PAPER-II- EDUCATION: PROBLEMS AND PERSPECTIVES

Objectives:-

To have an understanding of the types of problems prevailing at different levels of Education To explain the current problems and perspectives in Education.

To learn the different Funding Agencies for Research in Higher Education.

To understand the different Systems in Education: Distance Education, Non- formal Education, Alternative Schooling, Women's Education and Education for Differently Abled Children.

UNIT-I Primary Education

- **1.1**. Primary Education: Aims and Scope of Primary Education & Studies in Elementary Education
- **1.2** Elementary Education:—Universalisation of Elementary Education and National Curriculum Framework (2007)--Sarva Sikhsha Abhiyan(SSA)--Activity Based Learning--Activity Learning Method
- **1.3.** Promoting Value Education in Elementary Education--New Educational Policy(1986)---Life Oriented Education--The Kasturba Gandhi Shiksha Yojana
- **1.4.** Problems in Elementary Education in Teaching and Learning Process-- Educational Research in Social Sciences
- **1.5.** Curriculum: Child Psychology--Curriculum in Elementary Education-- Curriculum in Elementary Teacher Education

UNIT-II-Higher Education

- **2.1.**Objectives of Higher Education--evelopment of Colleges and Universities in recent years
- **2.2.**Management of Higher Education--Democratisation in Higher Education--Autonomy to Colleges and Deemed Universities
- **2.3.** Innovation in Higher Education--irtual Learning--Virtual University--Just in Time Education--Quality Assurance: NACC, AICTE & AIMC
- **2.4.** University Industry Interaction: Institutional Collaboration with Farms, Industries and Public Sectors
- **2.5.** Funding Agencies: UGC, CSIR, DST, NCERT and ISSR--Importance of Research in Higher Education--Research Organisations in India—Needed Research in Higher Education--Current Status of Research in Higher Education

UNIT-III Teacher Education

- **3.1.**Meaning and Scope of Teacher Education--Theory and Practice of Teacher Education--Need for Teacher Education--History of Teacher Education in India--Difference between In -service and Pre-service Programmes
- **3.2.** Educational Technology and Teacher Education--Curriculum for Teacher Education--National Policy for Teacher Training--Problems in Teacher Education
- **3.3.** Modern Trends in Teacher Education--Strategies for Classroom Management--Recent Research in Teacher Education
- **3.4.** Innovative Teaching Methods in Teacher Education--Case Studies of Successful Teachers--Effective Teaching Learning Materials in Teacher Education
- **3.5.** Code of Professional Ethics for Teachers--Journals in Education--National and International Abstract for Humanities

UNIT-IV Systems of Education: Distance Education, Non-Formal Education, Alternative Schooling and Women Education

- **4.1.** Distance Education: Objectives , Role and Importance of Distance Education
- **4.2.** Non-Formal Education: Importance, Status and Organisation of NFE and Different Approaches to NFE
- **4.3.** Alternative Schooling: Definition, Scope, Beneficaries and Status of Alternative Schooling
- **4.4.** Progress of Women's Education in India--Researches in Women Education--Present Trends of Women Education
- **4.5.** Methodology in Women's Education and Development--Important Features of Women's Education

UNIT-V Education for Differently Abled Children

- **5.1.** Objectives of the Education for the Disabled Children Uses of Technology for Differently Abled Children
- **5.2.** Integrated Education of Disabled Children (IEDC)
- **5.3.** Inclusive Education: Issues and Intervention-- Government Schemes for Abled Children and Teacher Training for the Children of Special Needs
- **5.4.** Types of Learning Disablity & Charcteristics of Differently Abled Children

Reference Books:

- 1. R.K. Rao(2007) Women in Education, New Delhi: Kalpaz Publications.
- **2.** Jaganath Patnaik (2007) **Higher Education in Information Age**, New Delhi: Authors press.
- **3.** Radha Dua (2008) **Women Education**, New Delhi: APH Publishing Corporation.
- **4.** Rabindra Seu (2008) **Encyclopedia of Higher Education**, New Delhi: Cresent Publication Corporation.
- **5.** Mishra. R.C. (2007) **Classroom Management**, New Delhi: APH Publication Corporation.
- **6.** Marlow Ediger & Bhascaka Raw.D (2003) **Elementary Curriculum,** New Delhi: Discovery Publising House.
- **7.** Kamat,H.D& David.A (2008) **A Non Formal Education**, New Delhi: Cresent Publication Corporation.
- **8.**Santhanam .T Prasad Babu . B. etal (2007) **Children in the Learning Disabilities**, New Delhi: Sonali Publications.
- **9.**Jampala Madhu Bala, Dignmarts Bhaskara Rao (2004) **Methods of Teaching Exceptional Children**, New Delhi:Discovery Publishing House.

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PAPER III- WEB- BASED LEARNING

Objectives:

After studying the paper, the scholars will be able to

- Explain the changing focus of the learning environment in general.
- State the technology integration in web-based learning.
- Discriminate the web-based pedagogical learning from other technology based learning.
- Appreciate the advantages of web-based teaching.
- Substantiate the effectiveness of computer mediated classes with special reference to resource support, evaluation and management.

UNIT-I Changing Faces of Learning Environment

- **1.1.** Learning Theories: Constructivism, Behaviourism, Observational Learning, Problem based Learning and Engagement Theory
- **1.2.** Distinct Learning Process: Meaning, Individual Learning and Life Long Learning
- **1.3.** Interactive Learning Environment: Computer Mediated Communication, Online Learning and Mobile Learning
- **1.4.** Virtual Learning: Opportunities and Challenges

UNIT-II-Technology in Web- Based Learning

- **2.1** Evolution of Learning Technology
- **2.2.** Technological Infrastructures
- **2.3.** Wireless LANs and Power Line LANs
- **2.4.** Satellite and Wireline Technology

UNIT-III Web-Based Pedagogical Learning

- **3.1.** Web-Based Pedagogical Learning: Theoretical Perspectives
- **3.2.** Web-Based Learning Approaches
- **3.3.** Web- Learning Environments
- **3.4.** Advantages of E-Learning

UNIT-IV Web-Based Teaching

- **4.1.** Web-Based Teaching: Theoretical Perspectives
- **4.2**. Online Teaching Tools
- **4.3.** Web-Based Instruction
- **4.4.** Web-Based Education: Problems and Prospects

UNIT-V Computer Mediated Classes: Resource Support, Evaluation and Management

- **5.1.** Interface Design in Computer Mediated Classes
- **5.2.** Resource Support in Hitech Learning
- **5.3.** Evaluation of Web-Based Learning
- **5.4.** Management of Web-Based Education

Text Book

Hemalata Talesra, Wasef Marashdesh and M.L. Nagda (2003). Web-Based Learning, Delhi: Authors Press.

References:

- 1. Reggie Kwan, et al (2002). Web-Based Learning: Men & Machines, Singapore: World Scientific Publishing Co.Pte. Ltd.
- 2. Bruce L. Mann(2006). Selected Styles in Web-Based Educational Research, Hershey: Information Science Publishing.
- 3. Martin Weller (2007). Virtual Learning Environments, Oxon: Routledge.
- 4. Anil Aggarwal (2003)Web-Based Education: Learning from Experience, Hershey: IRM Press
- 5. Arulsamy S and Sivakumar P (2009). Application of ICT in Education, Hydrabad: Neelkamal Publications Pvt. Ltd.
