

Pre Ph.D. Course-work (Education)

Programme Structure

The Pre Ph.D. course shall comprise of only one semester (i.e. six months) in which there will be two compulsory papers:

Paper	Title	Marks
I	Research Methodology in Behavioural Sciences	100
II	Paper-II: Emerging Trends and Issues in Education	100
Submission of two term papers (more than 7500 words) and presentation		50

Paper I: Research Methodology in Behavioural Sciences

UNIT I Research Procedure

- Meaning and objectives of educational research
- Selection of problem
- Review of literature
- Research design, population and sampling
- Tools and data collection
- Statistical analysis of data
- Formulation of conclusions and generalization

UNIT II Research Methods

- Philosophical research
- Historical research
- Descriptive research
- Survey research
- Development research
- Ex-post facto research
- Experimental Research
- Phenomenology
- Grounded theory
- Ethnographies
- Narrative research
- Case study
- Mixed method research

UNIT III Research Designs

- Experimental Designs: Pre-experimental, Quasi-experimental, and True-experimental designs, and Factorial designs
- Mixed Method Designs: Convergent Design, Explanatory Sequential Design, Exploratory Sequential Design

UNIT IV Data Analysis in Quantitative Research

- Parametric and Non Parametric Tests: Meaning and purpose, Difference between parametric and non-parametric test
- Parametric tests:
 - 't' test-theory, types and computation
 - ANOVA- theory, types and computation
 - ANCOVA-theory and computation
 - Regression, step regression
- Non-parametric tests:
 - Median test, sign test, Mann-Whitney U-test, and run test
 - "H" test, its meaning, purpose; assumptions and uses
 - Friedman Two-way analysis of variance
 - X²-test, its purpose and uses
- Advanced Techniques of Correlation
 - Contingency
 - Phi and Tetra choric Correlation

- Bi-serial and Point Bi-serial Correlation
- Partial and Multiple correlation

UNIT V Data Analysis in Qualitative Research

- Coding and classification-Axial coding, Selective coding
- Methods of Qualitative data analysis- content analysis, logical and inductive analysis, illustrative method; analogies, Criticism of historical data
- Meta-analysis
- Triangulation of data
- Trend analysis
- Utilization of corroborative analysis

UNIT VI Writing Research

- Need for writing research report
- Preparing research synopsis
- Writing research report
- Writing research paper
- Writing references (APA, MLA, Harvard style)

UNIT VII Computer Application in Research

- Use of computers in:
 - Data processing
 - Word processing
 - Graphical processing
 - Different phases of research
- Use of statistical software in data analysis

Suggested Readings:

- Creswell, J. W. (2011). *Educational research: Planning, conducting, and evaluating, quantitative and qualitative*. New Delhi: PHI learning.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). New Delhi: SAGE.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). New Delhi: SAGE.
- Creswell, J. W. (2015). *A concise introduction to mixed methods research*. New Delhi: SAGE.
- Gupta, S.P. (2017). *Research introductory: Concepts, methods, and techniques*. India: Sharda Pustak Bhavan.
- Best, J.W., & Kahn, J. V. (2006). *Research in education* (10th ed.). New Delhi: Pearson.
- Fox, D. J. (1969). *Techniques for the analysis of quantitative data*. Holt Rinehart, Winson.
- Garrett, H.E., & Woodworth, R. S. (1976). *Statistics in education and psychology* (11th ed.). New Delhi: Kalyani.
- Gay, L.R., Mills, G.E., & Airasian, P. (2009). *Educational research: Competencies for analysis and applications*. New Jersey: Merrill and Pearson.
- Tuckman, B.W. (1972). *Conducting fundamental research*. New York: Harcourt Brace Javonovich.

- Bogdan, R., & Taylor, S.L. (1975). *Introduction to qualitative research methods*. New Delhi: John Wiley and Sons.
- Dandekar, W. N., & Rajguru, M. S. (1988). *Introduction to psychological testing and statistics*. Bombay: Sheth.
- Freeman, F. S. (1964). *Theory and practices of psychological testing*. New York: Henry Holt.
- Lindeman, R. H. (1971). *Educational measurement*. Bombay, India: DB Taraporevala Sons.
- Micheels, W. J. (2015). *Measuring educational achievement*. New Delhi: Gyan Books.

Paper II: Emerging Trends and Issues in Education

UNIT I Interdisciplinary Approach in Education

- Interdisciplinary approaches - concept , need and scope
- Interdisciplinary approach in Teaching
- Interdisciplinary approach in Learning
- Interdisciplinary approach in Research

UNIT II Approaches of Learning

- Lifelong Learning
- Open and Distance Learning
- Co-operative Learning
- Blended Learning
- Flexi Space Learning
- Reflective Learning

UNIT III Processes of Learning

- Inquiry Based Learning
- Brain Based Learning
- Media literacy and Learning

Unit IV Andragogy

- Concept of andragogy
- Implications of andragogic techniques for teachers training
- Experiential Learning
- Field interactions and reflection
- Teacher experiences as the basis of training

UNIT V Trends in Education

- Inclusive Education
- ICT in Education
- Life Skill Education
- Multicultural Education
- Alternative Assessment
- Social Constructivism

UNIT VI Issues in Education

- Educational Policies
- Wellbeing Education
- Comparative Education
- Development Education
- Citizenship Education
- Economics of Education
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UNIT VII Globalization and Education

- Differences between globalization, internationalization, and internationalism
- Paradoxes of globalization
- Global Policies in Education. EFA, MDGs.

- Globalization and educational reform

Suggested Readings:

- Lindeman, E. C. (1926). *The meaning of adult education*. New York, NY: New Republic.
- Pratt, D. D. (1988). Andragogy as a relational construct. *Adult Education Quarterly*, 38(3), 160-172.
- Schön, D. (1987). *Educating the reflective practitioner*. San Francisco, CA: Jossey-Bass Publisher
- Suanmali, C. (1981). *The core concepts of andragogy*. Available from Dissertations & Theses Europe Full Text: Social Sciences.
- CBSE. (2005). *Life skill education and CCE (Class ix & x)*. Retrieved from http://www.cbse.nic.in/cce/life_skills_cce.pdf
- Dangwal, K.L (2010). *Computers in teaching and learning*. Agra: Vinod Pustak Mandir.
- Das, R. C. (1993). *Education technology: a basic text*. New Delhi: Sterling.
- Dasgupta, D. N. *Communication and Education*, Pointer Publishers
- Jha. M. (2002). *Inclusive education for all: schools without walls*. Chennai: Heinemann Educational Publishers.
- Ahuja. A, & Jangira, N.K. (2002): *Effective teacher training; cooperative learning Based approach*. New Delhi: National Publishing house.
- Sharma P.L (2003). *Planning inclusive education in small schools*. Mysore: RIE.
- Beauchamp, E. R. (2003). *Comparative Education Reader*. New York. Routledge Falmer.
- Patricia, K. K. Paul, R. F, (2003). *Comparative education- Exploring issues in international context*. New Jersey, Pearson Education Inc.
- Plantilla J.R. (2008). *Educational policies and human rights awareness for academic excellence*. Delhi.
- Mangal, S.K., & Mangal, U. (2013). *Essentials of educational technology*. New Delhi, India: PHI Learning.