

Syllabus for Ph. D. Entrance Test In Education

Objectives:

To enable the students to

- Relate philosophy and education
- Explain different sociological theories and its educational significance
- Explain the theories of education as social institution
- Apply theories of learning in classroom situation
- Suggest application of theories for personality development
- Understand the importance, concept, need and components of teacher effectiveness
- Identify strategies for enhancing teacher effectiveness
- Explain the concept of curriculum and process of curriculum development.
- Apply models in the development of curriculum.
- Evaluate the curriculum on the basis of appropriate model.
- Explain the concept & nature of research in education
- Explain the terms associated with research
- Apply appropriate methods of research in education
- Explain, construct & administer the tools & techniques of data collection
- Select sample by proper sampling methods
- Explain & select appropriate technique of data analysis to test the hypothesis
- Apply the knowledge of report writing

Module 1: Philosophical Perspectives of Education

- Modern concept of Philosophy – Logical Analysis, Logical Empiricism and Positive relativism
- Epistemology and Education: Nature and types of knowledge, Methods of acquiring valid knowledge with special reference to Analytical Philosophy, Dialectic approach, Scientific inquiry, Nyaya, Yoga
- Axiology and Education: Concept of Value, Relativity of values
- Indian schools of thoughts: Vedic, Buddhist, and Islamic period
Western schools of thoughts: Humanism, Existentialism, Essentialism, Progressivism

Module 2: Sociological perspective of Education

- Theoretical perspectives to study society: i) Functional ii) Conflict iii) Symbolic interactionism and its significance to education
- Concept of Modernization: individual and social modernity, Role of education in modernization
- Post modernism and its educational implication
- views of Jean François Lyotard, Michel Foucault, Jacques Derrida on post modernism,
- Gender ideology in Society: Meaning, Role of religion, constitution and law in gender ideology
- Gender differentiation, gender stereotyping gender inequality in the society

- Women empowerment: concept, aspects of empowerment, Role of education in empowerment
- Multicultural education, Media awareness, RTE-2009

Module 3: Reflecting on Teaching Learning Process

- Learning styles: Kolb's Learning style, Honey & Mumford's learning styles
 - Metacognition: Meaning, Difference between cognition and metacognition
Models of metacognition by Falvell's and Brown's.
 - Theories of Learning
 - a. Ausubel's meaningful verbal learning theory: Concept of cognitive structure, Types of learning, educational implication
 - b. Hebb's neurophysiological theory of learning
 - c. Roger's theory of experiential learning
- Theories of teaching: Formal theory, Descriptive theory and Normative theory; Difference between theories of learning and theories of teaching
- a. Carroll's model of Mastery Learning – need, assumptions, components, and implications
 - b. Slavin's QAIT model and its educational implication
 - c. Bruner's theory of Instruction: Four guiding principles of instruction
- Implications of brain research in teaching
 - Concept and need of inclusion; teaching techniques for inclusive Classrooms

Module 4: Personality and Adjustment

Personality theories

- a. Freud's psychoanalytic theory and defense mechanism
- b. Big 5 model of personality
- c. Roger's humanistic theory with specific reference to REBT
- d. Jung's theory with specific reference to MBT

Module 5: Reflecting on Teacher Education

- National Curriculum Framework (NCFTE) -2009 as given by National Council of Teacher Education (NCTE)
- Issues, concerns and problems of teacher education
- Difference between andragogy and pedagogy
- Reflective models and practices in teacher education
- Concept and characteristics of a profession
- Professional ethics and code of conduct for teachers and teacher educators
- Present status of teaching profession and enhancing the social status of teaching profession

Module 6: Professionalising Teacher Education

- Strategies for professional development of teachers through workshops, seminars, symposiums, panel discussions, conferences, self study, study groups and study circles, book clubs, extension lectures, research colloquium, refresher courses, orientation programmes

- Concept, need and components of teacher effectiveness
- Strategies for enhancing teacher effectiveness
- Current trends and procedures in evaluating teacher effectiveness
- Use of sign system, category system, portfolio assessment, academic performance indicators in teacher effectiveness

Module 7: Curriculum Development

- Understanding curriculum as a (body of knowledge to be transmitted,, product, process, praxis.)
- Elements and principles of curriculum development
- Models of Curriculum development.
 - a. Hunkin’s Decision- Making model
 - b. Weinstein and Fantini model
 - c. Fink’s model of integrated course design

Module 8: Curriculum Implementation and evaluation

- Factors influencing effective curriculum implementation
- Criteria for selecting learning opportunities
- ICT as a mode of curricular transaction with their strengths and limitation:
 - Computer based learning
 - Online learning
 - Blended learning
- Models of curriculum implementation
 - a. ORC mode I(overcoming resistance to change)
 - b. Linkage model
- Models of curriculum evaluation
 - a. Tyler’s Goal attainment model.
 - b. Stufflebeam’s CIPP model
 - c. Scriven’s Goal free model
 - d. Kirkpatrick’s 4 level model

Module 9: Concept and nature of research in education

Content:

- Nature of knowledge, different methods of acquiring knowledge, scientific inquiry, concept of research
- Introduction to research in education: Meaning & definitions, Characteristics, Need, Areas

- Importance of review of related literature & research Recording of the references, notes taking, use of cards Online, offline references
- Different terms: Objectives, Assumptions, Hypothesis-types & characteristics, Variables- types & control, Operational definitions, Limitations & Delimitations
- Types of Research: Fundamental, Applied, Action
- Approaches to research: Qualitative, Quantitative and Mixed method - Meaning, Difference and Steps involved
- Ethical consideration in research

Module 10: Research methods

Content:

- Research Methods (Steps, methods/designs , strengths and weaknesses)
 - a. Historical
 - b. Descriptive
 - c. Experimental

Module 11: Data collection procedures

Content:

- Techniques of data collection: Observation, Interview, projective & sociometric
- Tools of data collection: Achievement test, intelligence test, check list, rating scale, anecdotal records, attitude test, Aptitude test, Personality test Questionnaire—Merits & limitations
- Reliability & validity of tools & techniques: meaning, types of validity and reliability
- Sampling: Sample & population -- Meaning, Need, sampling error, determining sample size
- Probability sampling methods (random—simple, systematic, cluster, stratified, multistage, quota)
- Non probability sampling methods (incidental, purposive)

Module 12: Data analysis & report writing

Content:

- Types of data Analysis: i) Qualitative ii) Quantitative
 - i. Quantitative data Analysis**
 - 1. Descriptive analysis:**
 - a. Different scales (nominal, Ordinal, Interval, Ratio)
 - b. Uses of graphs in the analysis of data,
 - c. Measures of Central tendency (concept & uses)
 - d. Measures of variability (concept & uses)
 - e. Correlation-meaning & uses in research
 - 2. Inferential Analysis-**

I) Quantitative Analysis

Levels of significance, Degree of freedom, Type I & Type II error, Standard error of mean One tailed & two tailed test Power of Statistical test and effect size

Parametric tests—t test, analysis of variance, co-variance

Non Parametric tests-Mann Whitney U test, Chi square test, sign test, median test

II) Qualitative Data Analysis

Data reduction and Classification

Analytical Induction

Constant Comparison

- **Report Writing**-format, style, content & chapterization

References, appendices Characteristics of a good research report

Module number	Weightage in term of marks
Module 1 & 2	20 marks
Module 3 & 4	20 marks
Module 5 & 6	10 marks
Module 7 & 8	20 marks
Module 9 to 12	30 marks

References:

- Aggarwal, D (2007): *Curriculum development: Concept, Methods and Techniques*. New Delhi. Book Enclave.
- Anderson, JR (1983) *Rules of the mind* Hillsdale, NJ: Erlbaum
- Banrs, JA (1996), *Cultural diversity and education: Foundations curriculum and teaching* (4th ed) Boston: Allynand, Becon
- Best JW (1999) *Research in Education*, New Delhi: Prentice Hall of India Pvt Ltd
- Beyer, LE (Ed) (1996) *Creating democratic classrooms: The struggle to integrate theory and Practice* New York: Teachers College Press
- Beck, Clive & Clark Kosnik Albany (2006): *Innovations in Teacher Education: A Social Constructivist approach*. State University of York.
- Borg, WR and Gall, MD (1983) *Educational Research – An Introduction*, New York: Longman, Inc
- Christensen, L (2007) *Experimental Methodology* Boston: Allyn & Bacon
- Cohen Louis, Minion Lawrence & Morrison, Keith (2004). *A Guide to Teaching Practice* (5th edition). Rout ledge Falmer. London and New York.
- Dandapani, S (2001) *Advanced educational psychology, (2nd edition)*, New Delhi, Anmol publications pvt Ltd
- Dearden R F (1984) *Theory and practice in Education* Routledge K Kegan & Paul
- Erickson, H.L (2002) *Concept Based Curriculum and Instruction: Teaching beyond the facts*, Corsion Press, INC (A Sage Publication Company) Thousand Oaks: California.
- Fraenkel, JR, Wallen, NE (1996) *How to Design and Evaluate Research in Education* New York: McGraw Hill
- Gardner, H (1983) *frames of Mind: The theory of multiple intelligence* New York: Basic Books
- Herne Steve, Jessel John & Griffith, Jenny (2000). *Study to Teach: A Guide to Studying in Teacher Education*. Rout ledge Falmer. London and New York.
- Irvine, J.J. (2003): *Educating teachers for diversity: Seeing with a cultural eye*. New York: Teachers College Press.
- Kaul, Lokesh (1984) *Methodology of Educational Research* New Delhi: Vikas Publications

- Kerlinger, FN (1986) *Foundations of Behavioural Research* Fort Worth, TX: Harcourt Bmce Jovanovich
- Kirkpatrick, DL (2005) *Evaluating training Programmes: The four Levels* San Francisco: Brett-Kochler
- Korthagen, Fred A.J. et al; (2001): *Linking Practice and Theory: The Pedagogy of Realistic Teacher Education*. Lawrence Erlbaum Associates
- Lieber, CM (2002) *Partners in learning: from conflict to collaboration* Cambridge, MA, Educators for Social responsibility
- McKernan, James (2007): *Curriculum and Imagination: Process, Theory, Pedagogy and Action Research*. Routledge. U.K.
- Naik, JP (1975) *Equality, quality and quantity: The elusive triangle of Indian education*, Allied Publications, Bombay
- NCTE (1998): *Policy Perspectives in Teacher Education*. New Delhi.
- Caggart, G.L. (2005): *Promoting Reflective Thinking in Teachers*. Crown Press. .
- NCERT (2005). *National Curriculum Framework-2005*, NCERT, Sri Aurobindo Marg, New Delhi.
- Wiles, J.W. & Joseph Bondi (2006): *Curriculum Development: A Guide to Practice*. Pearson Publication
- Palmer, Joy A, (2001) *Fifty Modern thinkers on education: From Piaget to the present Day* Routledge Flamer London USA Canada
- Peters, RS (ed), (1975) *The Philosophy of education* Oxford University Press, London
- Piaget, J (1999) *Judgment and reasoning in the child* London: Routledge
- Patton MQ (2002) *Qualitative Research and Evaluation Methods* Thousand Oaks: CA: Sage
- Segal, JW Chipman, SF, & Glaser, R (1985) *Thinking and learning skills: Relating Instruction to Basic Research* (Vol I) Hillsdale, NJ: Erlbaum
- Synder, CR & Shane J Lopez (2007) *Positive psychology* SAGE Publications UK .
- Vygotsky L (1986) *Thought and language* (A Kazulin, Trans) Cambridge, MA: MIT Press
- Wiles, J.W. & Joseph Bondi (2006): *Curriculum Development: A Guide to Practice*. Pearson Publication