

## **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:

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