

# STATE TEACHER ELIGIBILITY TEST

## STRUCTURE AND CONTENT OF SYLLABUS

(Paper I and Paper II)

**I. Child Development and Pedagogy 30 Questions**

**a) Child Development (Primary School Child) 15 Questions**

- Concept of development and its relationship with learning.
- Principles of the development of children.
- Gross and fine motor development skills in infancy & preschool children.
- Socialization processes: Social world & children (Teachers, parents, peers.)
- Piaget, Kohlberg and Vygotsky: constructs and critical perspectives.
- Development of speech and language.
- Gender as a social construct; gender roles, gender- bias and educational practice.
- Individual differences among learners, understanding differences based on diversity of language, caste, gender, community, religion etc.
- Understanding child abuse.

**b) Concept of Inclusive education and understanding children with special needs. 5 Questions**

- Addressing learners from diverse backgrounds including disadvantaged and deprived.
- Addressing the needs of children with learning difficulties, impairment etc.
- Addressing the talented, creative, especially able learners.

**c) Learning and Pedagogy 10 Questions**

- How children think and learn.
- Factors contributing to learning –personal & environmental.
- Basic processes of teaching and learning; children's strategies of learning; learning as a social activity; social context of learning.
- Cognition & Emotional development of child.
- Motivation – Concept and types of Motivation; Relationship between Motivation and Learning.
- Gathering data about children from different context: Naturalist Observation, Reflective Journal, and Anecdotal Record.

**II. Language: 30 Questions**

**a) Language Comprehension 15 Questions**

Reading unseen passages- two passages one prose or drama and poem with questions on comprehension, inference, grammar and verbal ability ( Prose passage may be literary, scientific, narrative or discursive )

**b) Pedagogy of Language Development 15 Questions**

- Learning and Acquisition
- Principles of language Teaching
- Role of listening and speaking; function of language and how children use it as a tool
- Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form;
- Challenges of teaching language in a diverse classroom; language difficulties, errors and disorders
- Language Skills
- Evaluating language comprehension and proficiency: speaking, listening, reading and writing
- Teaching- learning materials: Textbook, multi- media materials, multilingual resource of the classroom
- Remedial Teaching

**III. Mathematics: 30 Questions**

**a) Content 15 Questions**

**Numbers**

- Squares and Square roots
- Cubes and Cube roots
- Integers
- Decimals and Fractions
- Algebraic Expressions and Identities
- Factorizations
- Rational Numbers

- Exponents and Powers
- Addition and Subtraction
- Operation on Numbers
- Ratio and proportion
- Measurement
- Comparing Quantities
- Direct and Inverse Variations
- Geometry
- Shapes & Spatial Understanding
- Solids around Us
- Mensuration
- Weight
- Data Handling
- Patterns
- Money

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**b) Pedagogical Issues:**

**15 Questions**

- Nature of Mathematics/Logical thinking; understanding children's thinking and reasoning patterns and strategies of making meaning and learning
- Place of Mathematics in Curriculum
- Language of Mathematics
- Community Mathematics
- Evaluation through formal and informal methods
- Problems of Teaching
- Error analysis and related aspects of learning and teaching
- Diagnostic and Remedial Teaching

**IV. Environmental Studies:**

**30 Questions**

**a) Content**

**15 Questions**

Term I and Term II textbooks developed by the state for classes I-V

**1. Science: VI-VIII**

- Food: Sources and Components
- Nutrition in Plants and Animals
- Light, Shadows and Reflection
- Electric Current and its effects
- Sound
- Microorganism : Friend and Foe
- Pollution of Air and Water
- Physical and Chemical changes
- Fibre to Fabric

**2. Social Science: (VI -VIII Social and Political Life, History –Our Pasts, Geography)**

**3. History:**

- From Gathering to Growing Food
- Rulers and Buildings
- India after Independence

**4. Geography:**

- Motions of the Earth
- Life in the Temperate Grassland
- Mineral and Power Resources.

**5. Social and Political Life:**

- Diversity and Discrimination.
- Understanding Media.
- Understanding Marginalisation

## b) Pedagogical Issues:

15 Questions

- Environmental Studies: Meaning and Nature.
- Objectives of teaching Environmental studies.
- Approaches to teaching Environmental Studies. NCF-2005
- Meaning of Child Centric activity based classroom.
- Principles and importance of Child Centred approach.
- Needs of the child.
- Development of various skills among the children through teaching of Environmental studies.
- Steps in planning and conducting activities.
- Methods of teaching environmental studies – Meaning, importance, advantages and disadvantages.
- Difference between various methods of teaching.
- Methods of teaching at Primary Level.
  - Problem solving method.
  - Question answer method or conversation method.
  - Project method
  - Play-way method
  - Story telling method
  - Scientific method
- Principles and Characteristics of good method of teaching.
- Different types of activities needed to develop various skills among the children.
- Teaching-Learning material –. Meaning, Importance, Qualities of teaching – Learning material, Types – Audio, Visual, Audio -Visual
- Meaning, importance, principles of lesson plan.
- Steps involved in Lesson Planning.
- Continuous and Comprehensive Evaluation:
- Difference between Assessment and Evaluation, importance of evaluation.
- Types of assessment – Formative and Summative
- Tools and Techniques of Evaluation (Summative Assessment)
- Types of questions, Qualities of a good question paper. Educational objectives for framing questions (According to NCERT Model.)
- Grading System at Primary level -Meaning, Type of grading.

**\*Note: For detailed syllabus, please refer Class I to VIII state and NCERT textbooks for primary level and classes VI to X NCERT textbooks for graduate level.**

## **Paper II**

### **I. Child Development and Pedagogy 30 Questions**

#### **a) Child Development (Elementary School Child) 15 Questions**

- Concept of development and its relationship with learning
- Principles of development of children
- Influence of Heredity and Environment
- Socialization processes: Social world and children (Teacher, parents, peers)
- Piaget, Kohlberg and Vygotsky: constructs and critical perspectives
- Concepts of child-centered and progressive education
- Critical perspective of the construct and intelligence
- Multiple Intelligence
- Language and Thought
- Gender as a social construct: gender roles, gender- bias and education practice
- Individual differences among learners, understanding differences based on diversity of language, caste, gender, community, religion
- Data organization, Graphical representation (Bar Diagram, Histogram, Frequency Polygon, Ogive, Pie and Line Graph), Mean, Mode, Median, Standard Deviation, Average Deviation, Quartile Deviation, Percentiles and Ratio
- Principles of constructing Objective, short answer, essay and Interpretative type
- Characteristic of good test: Reliability, Validity, Objectivity and Usability.

#### **b) Concept of Inclusive education and understanding children with special needs 5 Questions**

- Addressing learners from diverse backgrounds including disadvantage and deprived.
- Addressing the needs of children with learning difficulties and impairment.
- Addressing the Talented, Creative, Especially abled Learners.
- Mental Health and Mental Hygiene: Concept, causes and remedial Measures.

#### **c) Learning and Pedagogy 10 Questions**

- How children think and learn: how and why children fail to achieve success in school performance.

- Basic process of teaching and learning: children's strategies of learning and a social activity: social context of learning.
- Child as a problem solver and a scientific investigator.
- Alternative conceptions of learning in children, understanding children's errors as significant steps in the learning process.
- Cognition and Emotions.
- Motivation and learning.
- Factors contributing to learning- personal and environmental.
- Personality- Types.
- Constructivism and learning.

## **II. Language:**

### **a) Language Comprehension**

**15 Questions**

Two unseen prose passages(discursive or literary or narrative or scientific)with question on comprehension, grammer and verbal ability.

### **b) Pedagogy of Language Development**

**15 Questions**

- Learning and Acquisition
- Principles of language Teaching
- Role of listening and speaking; function of language and how children use it as a tool
- Critical perspective on the role of grammar in learning a language for communicating ideas verbally and in written form;
- Challenges of teaching language in a diverse classroom; language difficulties, errors and disorders
- Language Skills
- Evaluating language comprehension and proficiency: speaking, listening, reading and writing
- Teaching- learning materials: Textbook, multi- media materials, multilingual resource of the classroom
- Remedial Teaching

### **III. Mathematics:**

**30 Questions**

#### **a) Content**

**20 Questions**

#### **Number System**

- Knowing our Numbers
- Playing with Numbers
- Whole Numbers
- Real Numbers
- Fractions

#### **Algebra**

- Introduction to Algebra
- Polynomials
- Remainder Theorem
- Linear Equations up-to two variables
- Ratio and Proportion
- Quadratic Equations

#### **Arithmetic Progressions**

#### **Introduction to Trigonometry**

- Trigonometric Ratios
- Trigonometric ratios of some specific angles
- Trigonometric Ratios of Complimentary Angles
- Trigonometric Identities

#### **Some Applications of Trigonometry**

- Heights and Distances

#### **Geometry**

- Basic geometrical ideas (2-D)
- Lines and Angles
- Triangles, Polygons and Circles
- Understanding Elementary Shapes (2-D and 3-D)
- Symmetry: (reflection)



### **Mensuration**

- Surface Area and volumes of cube, cuboid, right circular cylinder, right circular cone, hemisphere and Sphere.

### **Coordinate Geometry**

#### **Data handling**

- Pictorial Representation of Data
- Mean, Median and Mode of Grouped and Ungrouped Data
- Probability

#### **b) Pedagogical Issues:**

**10 Questions**

- Nature of Mathematics/Logical thinking
- Place of Mathematics in Curriculum
- Language of Mathematics
- Community Mathematics
- Evaluation
- Remedial Teaching
- Problem of Teaching

### **IV. Science**

**30 Questions**

#### **a) Content:**

- Motion
  - Velocity
  - Acceleration
  - circular motion
- Force and laws of motion
- Gravitation
- Work and energy
- Sound-its speed and characteristics
- Light
  - Reflection
  - Refraction
  - Human eye
- Electricity

- Ohm's law
- Resistance
- Magnetic effect of current
- Air
- Materials from daily life
  - Metals and non-metals
  - Acid ,base and salt
  - Carbon and its compounds
- Atoms and molecules
  - Structure of the atom
  - Periodic classification of elements
- Basic chemical reactions and equations
- Water
- Physiological processes in plants and animals
  - Respiration
  - Transportation
  - Reproduction
- Cell -structure and functions
- Tissue- structure and functions
- Forest
- Environment
- Natural resources
- Control and coordination

**b) Pedagogical Issues:**

**10 Questions**

- Nature and Structure of Science
  - Aims of Objectives
  - Correlation with other subject i.e. Physics, Chemistry and Biology.
  - Scientific method and inquiry.
- Science Curriculum
  - Recommendation of NCF 2005 on teaching of Science.
- Approaches & Methods of teaching Science.
- Planning and Learning Resources for effective instruction in Science.

- Unit plan, Lesson Plan & TLMs.
- Community & Laboratory as a learning Resources.
- Evaluation of Learner progress
  - Tools & Techniques for assessment in Science.
  - Diagnostic & Remedial Teaching in Science.

## **V. Social Science:**

### **a) Content**

**40 Questions**

#### **History:**

- In the Earliest Cities
- New Questions and Ideas
- Ashoka, the Emperor who Gave up War
- The Delhi Sultanate
- The Mughal Empire
- From Trade to Territory (The Company establishes Power)
- When People Rebel (1857 & After)
- Women, Caste and Reform
- Nationalism in India

#### **Geography:**

- Planet Earth in the Solar System
- Globe
- Environment in its totality: Natural and Human Environment
- Air
- Water
- Human Environment: Settlement, Transport and Communication
- Resources: Types – Natural and Human
- Agriculture
- Physical Features of India

## **Social and Political Life:**

- Key Elements of a Democratic Government
- How the State Government Works
- The Indian Constitution
- Judiciary
- Electoral Politics
- Federalism
- Understanding Marginalisation
- Gender: Women Change the World
- Diversity and Discrimination

## **b) Pedagogical Issues:**

**20 Questions**

### **I. Concept**

- Social Science- Meaning, Importance and branches of Social Science
- Aims and Objectives of Teaching Social Science
- Approaches to teaching Social Science (Discipline based, Interdisciplinary based and Integrated based)

### **II. Methods:**

#### **1. Different methods of teaching Social Science- Advantages and Disadvantages**

- Lecture method
- Discussion method
- Project method
- Source method
- Question Answer method

### **III. Activities:**

- Various activities to develop skills through the teaching of Social Science

### **IV. Development of various skills through the teaching of Social Science**

### **V. Teaching Learning materials- Meaning, Objectives, Importance and Types**

### **VI. Lesson Plan- Meaning, Objectives, Importance and Steps**

VII. Evaluation and Assessment- Meaning, Difference between Evaluation and Assessment, Objectives of Evaluation, Educational objectives according to NCERT model), Types, Tools and Techniques of Evaluation

**\*Note: For detailed syllabus, please refer Class I to VIII state and NCERT textbooks for primary level and classes VI to X NCERT textbooks for graduate level.**

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