

IV Mathematics

30 Questions

a) Content

15 Questions

- Geometry
- Shapes & Spatial Understanding
- Solids around Us
- Numbers
- Addition and Subtraction
- Multiplication
- Division
- Measurement
- Weight
- Time
- Volume
- Data Handling
- Patterns
- Money

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

V. Environmental Studies

30 Questions

a) Content

15 Questions

- i. Family and Friends:
 - 1.1 Relationships
 - 1.2 Work and Play
 - 1.3 Animals
 - 1.4 Plants
- ii. Food
- iii. Shelter
- iv. Water
- v. Travel
- vi. Things We Make and Do

b) Pedagogical Issues**15 Questions**

- Concept and scope of EVS
- Significance of EVS, integrated EVS
- Environmental Studies & Environmental Education
- Learning Principles
- Scope & relation to Science & Social Science
- Approaches of presenting concepts
- Activities
- Experimentation/Practical Work
- Discussion
- CCE
- Teaching material/Aids
- Problems

Paper II (for classes VI to VIII) Elementary Stage**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 the development of children
- Influence of Heredity & Environment
- Socialization processes: Social world & children (Teacher, Parents, Peers)
- Piaget, Kohlberg and Vygotsky: constructs and critical perspectives
- Concepts of child-centered and progressive education
- Critical perspective of the construct of Intelligence
- Multi-Dimensional Intelligence
- Language & Thought
- 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.
- Distinction between Assessment for learning and assessment of learning; School-Based Assessment, Continuous & Comprehensive Evaluation: perspective and practice
- Formulating appropriate questions for assessing readiness levels of learners; for enhancing learning and critical thinking in the classroom and for assessing learner achievement.

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.