

TEACHING OF MATHEMATICS

SECTION- A

LONG QUESTIONS

- I. Explain the terms Axioms, Postulates, Assumptions and Hypothesis in Mathematics with suitable examples.
- II. What do you mean by 'Mathematics'? Discuss the values of teaching Mathematics at school level.
- III. Explain the educational values of mathematics by making special reference to its place in life.
- IV. "The progress and improvement of mathematics are linked with the prosperity of the state". Explain in detail.
- V. Explain the meaning and nature of mathematics.
- VI. Explain the meaning of mathematics. Discuss the importance of mathematics in everyday life.
- VII. What should be the place of mathematics in the school curriculum in the present era of calculators and computers?
- VIII. Describe the importance of history of mathematics for a teacher of mathematics.
- IX. Write in detail the contribution of Aryabhata and Euclid in field of Mathematics.
- X. Discuss the contribution of Ramanujam and Pythagoras to Mathematics.
- XI. Discuss the contribution of Aryabhata and Bhaskaracharya to Mathematics.
- XII. Discuss the contribution of Euclid and Pythagoras to Mathematics.

SHORT QUESTIONS

Write short notes on the following:

- i. Nature of Mathematics
- ii. Importance of Mathematics in daily life.
- iii. Axioms and postulates
- iv. Explain axioms/ postulates/ hypotheses/ assumptions with examples
- v. Describe the development of notation system
- vi. Explain the Babylonians contribution
- vii. Practical value of mathematics
- viii. Meaning of Mathematics
- ix. Any two values of teaching Mathematics
- x. Scope of Mathematics

SECTION- B

LONG QUESTIONS

- I. What do you understand by pedagogical analysis? Write the procedure for continuing pedagogical analysis by taking an example.
- II. Write in detail aims of teaching Mathematics at secondary school level.
- III. What are the objectives of teaching mathematics in secondary schools? How far are these realized in actual practice?
- IV. In the light of educational values of mathematics, what should be the aims of teaching mathematics at the high school stage?
- V. Describe the Bloom's taxonomy of educational objectives for cognitive domain. How can the knowledge of taxonomy increase effectiveness of teaching?
- VI. What is meant by pedagogical analysis? Explain the procedure for pedagogical analysis.
- VII. Discuss in detail the Bloom's taxonomy of educational objectives for teaching Mathematics.

SHORT QUESTIONS

- VIII. Write short notes on the following:
 - i. Objectives in behavioral terms
 - ii. Difference between aims and objectives.
 - iii. Need of pedagogical analysis for a teacher.
 - iv. Meaning of pedagogical analysis in Mathematics
 - v. Objectives of teaching Mathematics at elementary schools.
 - vi. Four components of pedagogical analysis