B.Ed. (1 Semester) Examination

PEDAGOGY OF MATHEMATICS

Paper IV (a) (i)

Time: 3 Hours

[Max. Marks: 70

Part - A (Marks: $5 \times 4 = 20$)

Answer any five questions in about one page each from the following eight questions.

Each question carries 4 marks.

- Discuss the following:
 - (a) Scope of Mathematics
 - (b) Meaning of Mathematics
- 2. What are the difficulties in using mathematics? What measures you take to overcome it?
- 3. How do you explore mathematical language from children's experience?
- 4. How do you appreciate the dialogue among peer group?
- Write aims of learning mathematics.
- 6. How do you relate mathematics education to natural and social environment?
- Describe the features of well-developed learning objectives.
- Discuss about Pedagogic Shift in Assessment.

Part - B (Marks: $5 \times 10 = 50$)

Answer any five essay questions in about three pages each from the following eight questions. Each question carries 10 marks.

- 9. Explain the concept of unsolved problems in mathematics. Why the knowledge of unsolved problems in mathematics is essential to maths teacher?
- Discuss the contributions of (a) Pythagoras (b) Aryabhatta
- Discuss development of problems solving skills among students.
- Discuss about Anderson and Karthwohl's Taxonomy.
- 13. What do you mean by academic standards? Explain academic standards.
- 14. What do you mean by democratizing mathematics learning? How do you promote it in your classroom?
- 15. Discuss Pedagogical Shift in
 - (a) Mathematics Curriculum (b) Planning Teaching-Learning.
- 16. Explain the meaning, concept and nature of content-cum-methodology.