Reg.	No

Name.....

B.Ed. (CREDIT AND SEMESTER) DEGREE EXAMINATION DECEMBER 2018

First Semester

EDU 104.16—UNDERSTANDING THE DISCIPLINE OF MATHEMATICS EDUCATION (Two Year Course—2018 Admission onwards)

Time: Two Hours

Maximum: 50 Marks

Part A

Answer all questions.

Each question carries 1 mark.

- 1. Write any two contributions of Bhaskaracharya.
- 2. What is meant by Mathematics?
- 3. What is the meaning of the word 'Geometry'?
- 4. What is the difference between pure and applied mathematics?
- Write any two objectives of learning mathematics at secondary level.
- Name any two Western Mathematicians.
- 7. List any two disciplinary values of learning mathematics.
- 8. Give one situation where ICT can be used in teaching mathematics.
- Mention two roles of mathematics in the social realm.
- 10. Write two characteristics of Mathematics.

 $(10 \times 1 = 10 \text{ marks})$

Part B

Answer any five questions. Each question carries 2 marks.

- 11. What is new math movement?
- Differentiate aims and objectives of teaching mathematics.
- 13. Why Algebra is considered as the generalised Arithmetic?
- 14. List any four practical values of teaching mathematics.
- 15. List the objectives under affective domain according to Bloom's Taxonomy.
- 16. How mathematics related to Music.

Part C

Answer any five questions. Each question carries 4 marks.

- 17. Explain the scope of mathematics in the 21st Century.
- 18. Write a short note on any one Indian Mathematician.
- 19. Explain the relevance of knowledge of History of Mathematics.
- 20. Explain the role of induction in the teaching and learning of Mathematics.
- 21. Briefly explain the tripolar relation in the teaching and learning of Mathematics.
- 22. Distinguish competence based instruction and competence based evaluation.
- 23. Discuss Revised Bloom's Taxonomy (RBT) of Educational Objectives.

 $(5 \times 4 = 20 \text{ marks})$

Part D

Answer any one question. The question carries 10 marks.

- Discuss the general objectives of teaching mathematics of different stages—Primary, Secondary and Higher Secondary.
- 25. Briefly explain with suitable example of correlation of mathematics with different subjects.

 $(1 \times 10 = 10 \text{ marks})$