

D 73069



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Name.....

Reg. No.....

**FIRST SEMESTER B.Ed. DEGREE EXAMINATION, NOVEMBER 2019**

B.Ed.

**EDU 05.10—THEORETICAL BASES OF TEACHING MATHEMATICS**

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer all questions.*

*Each question carries 2 marks.*

1. What are the fundamental branches of Mathematics ?
2. Point out the nature of "Mathematics as a language".
3. What are axioms and postulates ?
4. Write any two objectives of teaching mathematics at secondary level.
5. What are the objectives coming under 'cognitive domain' in the Revised Blooms Taxonomy ?
6. Define teaching.
7. What do you mean by link practice in microteaching ?
8. What is problem based learning ?
9. Give an illustration of proof by mathematical induction.
10. Which are the steps involved in project method ?

(10 × 2 = 20 marks)

**Part B**

*Answer any ten questions.*

*Each question carries 4 marks.*

11. How pure mathematics differs from applied mathematics ?
12. Give a short note on the link between fundamental branches of mathematics.
13. Briefly explain the development of mathematics as a science".
14. Explain the recommendations of various committees and commissions in India towards mathematics.
15. Write a short note on the aims of teaching mathematics.
16. Describe the phases of teaching.

**Turn over**

17. Explain constructivist approach in teaching mathematics.
18. Explain inductive - deductive method in the teaching of mathematics.
19. Give a short description about various techniques of teaching Mathematics.
20. Explain Bloom's Taxonomy of educational objectives.
21. Describe the topical and spiral approaches in curriculum organization.
22. Explain the features of Nuffield curriculum.

(10 × 4 = 40 marks)

### Part C

*Answer any two questions.  
Each question carries 10 marks.*

23. Explain the correlation of mathematics.
24. What are teaching skills ? Explain microteaching procedure.
25. Explain different types of curriculum. Give a short description about major curriculum reforms.

(2 × 10 = 20 marks)