

D 11754



(Pages : 2)

Name.....

Reg. No.....

FIRST SEMESTER B.Ed. DEGREE EXAMINATION, NOVEMBER 2021

B.Ed.

EDU 05.10—THEORETICAL BASES OF TEACHING MATHEMATICS

(2017 Scheme)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer all questions.

Each question carries 2 marks.

1. Briefly explain the nature of "Mathematics as a game".
2. How mathematics as a science differ from basic science ?
3. Illustrate the correlation of mathematics with biology.
4. Briefly explain the phases of teaching.
5. Differentiate aims and objectives.
6. Write any four recommendations of KCF towards mathematics teaching in secondary schools.
7. Write any four maxims of teaching.
8. What is microteaching ?
9. Give any four features of good questions.
10. Which are the different types of curriculum ?

(10 × 2 = 20 marks)

Part B

Answer any ten questions.

Each question carries 4 marks.

11. Discuss the role of axioms and postulates in learning Mathematics ?
12. Describe the aims of teaching mathematics.
13. Explain the nature of Mathematics.
14. Explain any *four* teaching skills and their component skills.
15. Compare Blooms Taxonomy with Revised Blooms Taxonomy.

Turn over

18070

16. Describe micro-teaching cycle.
17. Explain laboratory method of teaching mathematics with one illustration.
18. Write a note on different kinds of proofs in mathematics.
19. Explain the steps in curriculum development.
20. Describe any *four* techniques of teaching mathematics.
21. What are the steps involved in problem solving method ?
22. Describe briefly the principles of curriculum construction.

(10 × 4 = 40 marks)

Part C

Answer any two questions.

Each question carries 10 marks.

23. Describe the history of Mathematics from ancient period to 20th century.
24. Explain various approaches in the teaching of Mathematics.
25. Describe the important curriculum reforms in Mathematics.

(2 × 10 = 20 marks)