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Name.....

Reg. No.....

FIRST SEMESTER B.Ed. DEGREE EXAMINATION, NOVEMBER 2022

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. Give an example for proof by contradiction in Mathematics.
2. Write any *two* peculiarities of Mathematical language.
3. Why Mathematics is called as a tool subject ?
4. What do you mean by teaching Skill ?
5. What is 'Undifferentiated Curriculum' ?
6. What are the contributions of 'Aryabhata' ?
7. List out the limitations of Project Method.
8. List out the educational objectives under affective domain.
9. Give an example of a project in Mathematics.
10. How will you define Hidden curriculum ?

(10 × 2 = 20 marks)

Part B

Answer any **ten** *questions.*
Each question carries 4 *marks.*

11. Define micro-teaching cycle. Describe any two Micro-teaching skills with their behaviour components.
12. Compare inductive-deductive methods of teaching Mathematics with suitable examples.
13. What are the objectives of teaching Mathematics at senior secondary level ? Explain the maxims of teaching.

Turn over

14. Write a short note on project method and problem solving method.
15. Briefly explain the nature and scope of Mathematics.
16. Bring out the relative merits and demerits of Analytic and Synthetic methods of teaching Mathematics.
17. Differentiate spiral curriculum and concentric curriculum.
18. Briefly explain the skill of stimulus variation with its behaviour components.
19. Discuss the role of SCERT in the professional growth.
20. Explain Analytic method of teaching Mathematics with an example.
21. What are the implications of Nuffield Mathematics Project.
22. Briefly explain the steps in project method of teaching.

(10 × 4 = 40 marks)

Part C

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

23. Explain the major principles in curriculum construction. Give a brief description of important Mathematics curriculum reforms.
24. Explain laboratory method of teaching Mathematics with suitable example.
25. What are major teaching skills? Explain the micro teaching cycle.

(2 × 10 = 20 marks)