D 52000 (Pages : 2) Name.....

Reg. No.....

FIRST SEMESTER B.Ed. DEGREE EXAMINATION, DECEMBER 2018

Education

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. Write any *two* peculiarities of Mathematics language.
2. Write any *two* examples of correlation of Algebra with Geometry.
3. Give an example for proof by contradiction in Mathematics.
4. Write *two* merits of Problem-solving method.
5. Write two features of NCERT curriculum.
6. Write two examples for correlation of Mathematics with life.
7. Define teaching.
8. Write two aims of learning Mathematics at primary level.
9. What is stimulus variation ?
10. Write any *two* objectives of teaching Mathematics with respect to KCF.

(10 × 2 = 20 marks)

Part B

Answer any **ten** *questions.*

Each question carries 4 *marks.*

11. Explain the maxims of teaching.
12. What are the objectives of teaching Mathematics at senior secondary level ?
13. Write a short note on the implications of the theory of Gagne in Mathematics learning.
14. Explain the types of questioning with examples.

Turn over

Scanned with CamScanner

15. Explain constructivist approach in the teaching of Mathematics.

16. Briefly explain the development of Mathematics.

17. Explain adaptation and accommodation in Piaget's theory with examples from Mathematics.

18. Describe briefly the contributions of Bhaskaracharya.

19. Describe the logical and psychological approaches in curriculum construction.

20. What is the role of Mathematics in school curriculum ?

21. Mathematics is a science, but it is different from other sciences. Explain.

22. How will you impart Mathematical values through teaching.

(10 × 4 = 40 marks)

Part C

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

23. Explain the steps in the curriculum development. Give a brief description of important Mathematics curriculum reforms.

24. Explain the theory of Bruner, and its educational implications in Mathematics learning.

25. Explain Laboratory method of teaching Mathematics with suitable example.

(2 × 10 = 20 marks)

Scanned with CamScanner