Reg. No. :

Name :

First Semester B.Ed. Degree Examination, November 2019 EDU 04.7 : THEORETICAL BASE OF MATHEMATICS EDUCATION

(2019 Admission)

Time : 2 Hours

Max. Marks : 50

H = 2736

PART – A

Select the most appropriate option from those given in the brackets for questions: 1 to 5

- 1. Which among the following is an example of Applied Mathematics
 - (a) Geometry
 - (b) Operation Research
 - (c) Trigonometry
 - (d) Algebra
- 2. The book *Elements* was written by
 - (a) Russel
 - (b) John Napier
 - (c) George Cantor
 - (d) Euclid
- 3. Which one of the following is not a task in pre-active phase of teaching?
 - (a) Designing the learning experiences
 - (b) Setting Learning Objectives
 - (c) Evaluating the learning experiences
 - (d) Doing pedagogic analysis of the content

P.T.O.

- 4. Particular to General is the way we choose in
 - (a) Inductive Method
 - (b) Deductive Method
 - (c) Analytic Method
 - (d) Synthetic Method
- 5. Individualized Instruction technique aimed to empower reading, writing and referencing skill of students
 - (a) Homogenous grouping
 - (b) Assignments
 - (c) Dalton Plan
 - (d) Drill work

(5 × 1 = 5 Marks)

PART – B

Write the answers in a sentence/ word (questions 5 – 10). Each question carries 1 Mark.

- 6. Origin of the word algebra is
- 7. 'Heurisco' means
- 8. What is specification?
- 9. Affective domain is also called as
- 10. Write any one demerit of drill work.

 $(5 \times 1 = 5 \text{ Marks})$



Answer all questions in a paragraph.

- 11. Discuss the benefits of Mental Math.
- 12. How will you differentiate Inductive and deductive reasoning?
- 13. Physics can't exist without mathematics. Elucidate.
- 14. Write a short note on the concept of classroom without walls.
- 15. What are the features of good questions?

 $(5 \times 2 = 10 \text{ Marks})$

PART – D

Answer any four questions in 1¹/₂ page

- 16. Explain the major events in the development of mathematics.
- 17. Discuss the major contributions of Ramanuja to mathematics.
- 18. How far laboratory method is helpful in mathematics learning?
- 19. Give a brief account of the phases of teaching.
- 20. Describe the qualities of a good mathematics teacher.
- 21. What are the suggestions of KCF 2007 regarding the learning of mathematics?

(4 × 5 = 20 Marks)

PART – E

Answer any one question in 3 pages.

- 22. Explain the values of teaching mathematics.
- 23. Describe the roles of a constructivist teacher in the changing scenario.

(1 × 10 = 10 Marks)

H – 2736