

B.Ed. (CREDIT AND SEMESTER) DEGREE EXAMINATION, NOVEMBER 2017**First Semester****Pedagogic Course****EDU 104. 16—UNDERSTANDING THE DISCIPLINE OF MATHEMATICS EDUCATION****(Two Year Course—2015 Admission onwards)****[Regular/Supplementary]**

Time : Two Hours

Maximum : 50 Marks

Part A*Answer all questions.**Each question carries 1 mark.*

1. Write any two mathematical contributions of Rene Descarte.
2. What is the meaning of the word 'Geometry' ?
3. Why Algebra is considered as the generalized Arithmetic ?
4. What is the difference between Pure and Applied Mathematics ?
5. List any two disciplinary values of learning Mathematics.
6. How Mathematics is related to Music ?
7. Write any two objectives of teaching Mathematics at Primary level.
8. What is the role of symbols in Mathematics ?
9. Name the author of 'Sidhanta Siromani'.
10. What is meant by 'Mathematics' ?

(10 × 1 = 10 marks)**Part B***Answer any five questions.**Each question carries 2 marks.*

11. Briefly explain the concept of 'New Math'.
12. Write a short note on the development of Mathematics from empirical to rational stage.
13. What are the major contributions of Mathematics to the field of Information and Communication Technology ?
14. Define Mathematical Creativity.

Turn over

15. Bring out the importance of history of Mathematics.
16. What is meant by Experimental learning ?

(5 × 2 = 10 marks)

Part C

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

17. Explain the role of Mathematics in the social development.
18. What is meant by Mathematization of thinking process ? Write a situation where Mathematical thinking can be developed.
19. Write any four Mathematical concepts/principles used by an individual in his daily life.
20. Explain the major tenets of cognitive constructivism.
21. Write a short note on any one Indian Mathematician.
22. Do you think behaviourism is relevant in Mathematics education - Establish your answer.
23. Illustrate the relationship of Mathematics with other subjects.

(5 × 4 = 20 marks)

Part D

*Answer any one question.
The question carries 10 marks.*

24. What is meant by 'Aims of teaching Mathematics' ? Explain various aims of teaching Mathematics with suitable examples.
25. Explain Gardner's theory of multiple intelligences. Bring out its implications in mathematics education.

(2 + 8 = 10 marks)

(5 + 5 = 10 marks)

[1 × 10 = 10 marks]