

Reg. No. :

Name :

First Semester B.Ed. Degree Examination, June 2022

EDU 04.7 : THEORETICAL BASE OF MATHEMATICS EDUCATION

(2019 Admission onwards)

Time : 2 Hours

Max. Marks : 50

Instruction : (Answer all questions from Part – A, Part – B and Part – C, **four** questions from Part – D and one question from Part – B)

PART – A

- I. Select the most appropriate option from those given in the brackets for questions 1 to 5.
1. “The wholehearted purposeful activities carried out in a natural setting” Who define this?
 - (a) Allen
 - (b) Bruner
 - (c) Kilpatric
 - (d) Armstrong
2. National Mathematics Day is celebrated on
 - (a) December 22
 - (b) November 22
 - (c) December 25
 - (d) November 25
3. The specification of the objective “Create” is
 - (a) Produce
 - (b) Recognises
 - (c) Classifies
 - (d) Recalls

P.T.O.

4. "Mathematics is the science of quantity". Who stated?
- (a) Comte (b) Locke
(c) Gauss (d) Aristotle
5. The observable and measurable behavioral changes of the learner after the realisation of objectives
- (a) Assessment (b) Objectives
(c) Learning experience (D) Specifications

(5 × 1 = 5 Marks)

PART – B

- II. Write the answers in a sentence/word (questions 6 to 10). Each carries 1 mark.
6. Write any two contributions of Aryabhatta.
7. What is the meaning of the word "Analysis?"
8. Write any two qualities of Mathematics teacher.
9. Write a specification of the instructional objective" Comprehend".
10. Mention two nature of Mathematics.

(5 × 1 = 5 Marks)

PART – C

- III. Answer **all** questions in a paragraph.
11. Write a short note on the contribution of Bhaskaracharya.
12. Discuss the concept of objective based instruction.
13. Describe briefly the maxims of teaching.
14. Compare and contrast Inductive and deductive method of teaching Mathematics.
15. Write a short note on the correlation of Mathematics with daily life.

(5 × 2 = 10 Marks)

PART – D

- IV. Answer any **four** questions in $1\frac{1}{2}$ page.
16. Explain Bloom's Taxonomy of Educational Objectives of Psychomotor domain.
 17. What is meant by Laboratory method? Explain with an example.
 18. Write a short note on any two values of learning Mathematics.
 19. Discuss the merits and demerits of lecture method.
 20. Explain the objectives of teaching Mathematics as enumerated by NCF (2005).
 21. Explain the features of Dalton plan.

(4 × 5 = 20 Marks)

PART – E

- V. Answer any **one** question in **3** pages.
22. Explain conceptual overview of Bloom's Taxonomy of objectives of teaching and learning of cognitive. Domain.
 23. Explain analytic and synthetic method of teaching Mathematics Illustrate with examples. Write merits and demerits.

(1 × 10 = 10 Marks)
