

**Avinashilingam Institute for Home Science and Higher Education for Women  
(Deemed to be University) Coimbatore – 641 043**

Bachelor of Education Degree Examination – November 2018  
I Semester

Class : I B.Ed./I B.Ed. Spl.Edn.

Time: 3 Hrs  
Max. Marks: 100

**18BEDM11/18BDSM11 School Subject I : Introduction to Mathematics Education**

**Part – A**

**10 X 1 = 10**

**Choose the Correct Answer**

1. Which of the following is *not* the nature of mathematics?
  - a. Abstractness
  - b. Logical structure
  - c. Memorization
  - d. Brevity
2. "Mathematics is a way to settle in mind the habit of reasoning" is said by
  - a. Gauss
  - b. Fermat
  - c. Euler
  - d. Locke
3. "Mathematics is helpful for studying the impact of atmospheric change on aquatic and non-aquatic life". This refers to correlation of mathematics with
  - a. History
  - b. Geography
  - c. Economics
  - d. Physics
4. Mathematics mostly helps one with \_\_\_\_\_ thinking.
  - a. critical
  - b. concrete
  - c. convergent
  - d. divergent
5. Teaching Mathematics in primary means making a child aware of
  - a. geometry
  - b. algebra
  - c. numbers
  - d. theorems
6. "Mathematics develops patience and perseverance in the students. It strengthens their will power" This comes under \_\_\_\_\_ value.
  - a. social
  - b. disciplinary
  - c. cultural
  - d. practical
7. Geographia was invented by
  - a. Aryabahata
  - b. Pythagoras
  - c. Ptolemy
  - d. Hipparchus
8. Who is called the Princeps mathematicorum, or the "Prince of mathematics" ?
  - a. Euclide
  - b. Bhaskara
  - c. Ramanujam
  - d. Gauss
9. Which one of the following is the most valid expectation for teaching mathematics ?
  - a. Challenging work
  - b. Clear goal
  - c. Job security
  - d. Popularity
10. What should be the common behaviour of the mathematics teacher in the class ?
  - a. Assertive
  - b. Friendly
  - c. Harsh
  - d. Kind

**Answer the following questions****Answer should not exceed 400 words or two pages**

11. a. Describe the beauty of mathematics.  
(or)
11. b. Explain "Mathematics is the study of quantity, structure, space, and change".
12. a. How will you relate Mathematics with its branches ?  
(or)
12. b. What is the importance of correlational teaching in mathematics ?
13. a. What are the objectives of teaching mathematics at secondary level ?  
(or)
13. b. Describe the practical values of teaching mathematics ?
14. a. Describe the four main Contributions by Babylonians to mathematics.  
(or)
14. b. Describe the contributions of Hindus to mathematics.
15. a. What are the skills required for a mathematics teacher ?  
(or)
15. b. What do you mean by 'professional ethics of mathematics teachers' ?

**Part – C****5 X 12 = 60****Answer the following questions****Answer should not exceed 800 words or four pages**

16. a. Explain the nature of mathematics with illustrations.  
(or)
16. b. Describe the scope of mathematics in our environment.
17. a. How will you teach mathematics in relation to Physics, Chemistry, Philosophy and History ?  
(or)
17. b. How will you teach mathematics in relation to our life situations ?
18. a. What are the aims of teaching mathematics at Primary and Higher Secondary levels ?  
(or)
18. b. Describe the practical and aesthetic values of teaching mathematics.
19. a. Describe any four contributions of Aryabhata and Bhaskara towards mathematics.  
(or)
19. b. Describe in detail the historical development of mathematics from 19<sup>th</sup> to 20<sup>th</sup> centuries ?
20. a. What are the qualities of a good mathematics teacher ?  
(or)
20. b. What are the activities required for the professional development of the mathematics teacher?