



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

Bachelor of Education Degree Examination – April 2019

IV Semester

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

Time: 3 Hrs  
Max. Marks: 100

**17BEDM14/17BDSSM14 School Subject I : Professionalising Mathematics Education**

**Part – A**

**10 X 1 = 10**

**Choose the correct answer**

- The volume of a cube is  $64 \text{ cm}^3$  and its Surface area is
  - $16 \text{ cm}^2$
  - $64 \text{ cm}^2$
  - $96 \text{ cm}^2$
  - $128 \text{ cm}^2$
- If  $\log_{32} x = 0.8$ , then x is equal to
  - 10
  - 12.8
  - 25.6
  - 16
- Which is not the quality of a Mathematics text book ?
  - It should be well illustrated
  - The content should be up-to-date
  - The content should be arranged in logical and psychological orders.
  - It should be written in a difficult language.
- Which is not the use of Mathematics text book ?
  - It is a ready source of authoritative information
  - It is a source of factual material
  - It is to have consistency of the subject-matter
  - It is to provide motivation by attractive presentation
- Electronic evidence is a collection of electronic evidence assembled and managed by a user demonstrating his/her abilities and platforms for self-reflection.
  - E-mail
  - e-portfolio
  - Wikipedia
  - Programmed learning
- Which of the following is not an example of Learning Management System ?
  - Moodle
  - Mooc
  - Blackboard
  - Edmodo
- Which among the following is also known as a cycle of action or cycle of inquiry ?
  - Action Research
  - Experimental study
  - Behaviour study
  - Observation study
- Which scientific method focuses on testing hypotheses developed from theories ?
  - Deductive method
  - Inductive method
  - Analytic method
  - Pattern method
- Which of the following is an advantage to students from involvement in co-curricular activities ?
  - It requires financial commitment and can cause stress of time constraints
  - It teaches time management and organization and helps improve confidence
  - Parents are often required to be involved and all parties often become overly tired
  - Students earn extra credit for their involvement and they are guaranteed better grades in school
- Below are the disadvantages of field trip, except
  - It is costly
  - It involves logistic
  - Gives me not enjoyable experiences
  - It is extravagant with time

## Answer the following questions

Answer should not exceed 400 words or two pages

11. a. What are types of text in content analysis in Mathematics ?  
(or)
  11. b. What are the uses of content analysis in Mathematics ?
  12. a. What is the need of Mathematics text book in teaching-learning ?  
(or)
  12. b. Mention any five uses of Mathematics text book outside the classroom.
  13. a. Explain e-content standards in Mathematics.  
(or)
  13. b. What is the role of teachers in e-content development ?
  14. a. Explain Independent and dependent variables with examples .  
(or)
  14. b. What are the advantages of research in Mathematics Education ?
  15. a. What are the advantages of excursion for learning Mathematics ?  
(or)
  15. b. What are the objectives of Mathematics Club in schools ?
- Part – C**
- Answer the following questions**
- Answer should not exceed 800 words or four pages**
16. a. Prepare the pedagogical analysis of the following topics :  
i. Volume of a Cone  
ii. Solving Quadratic Equations  
(or)
  16. b. Critically analysis the content in Mathematics for the IX standard in the Tamilnadu State Board text book.
  17. a. What are the characteristics of good text book in Mathematics ?  
(or)
  17. b. What are the functions of a Mathematics text book in high schools ?  
(or)
  18. a. Describe the steps for e-content development in Mathematics.  
(or)
  18. b. Describe the tools for creating, packaging and delivering the e-content to the learner
  19. a. Explain different types of Research with illustrations.  
(or)
  19. b. Describe the steps for action research in Mathematics Education.
  20. a. How will you organize a Mathematics fair in your school ? What are the advantages of Mathematics fair for teaching-learning ?  
(or)
  20. b. How will you make learning of Mathematics a Pleasurable one?

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