



Merrinifc

**Avinashilingam Institute for Home Science and Higher Education for Women**

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)  
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India

**Bachelor of Education / B. Ed. Special Education (VI/II) Degree Examination - July 2022**  
**II Semester**

**Class : I B. Ed. / I B.Ed. Special Education (VI / II)**

**Time : 3 Hours**

**Max. Marks : 100**

**21BEDM12/ 21BDSM12 School Subject I: Methods and Techniques of Teaching Mathematics**

**Course Outcomes:**

- CO1: Apply the micro teaching skills in teaching mathematics  
CO2: Investigate the distinctive characteristics of various instructional methods suitable for teaching mathematics  
CO3: Apply appropriate techniques and methods for teaching varied context and content in mathematics  
CO4: Understand the different approaches in planning for instruction in teaching mathematics  
CO5: Design different individualised instructional material for teaching mathematics

**Part A**  
**Choose the Correct Answer**

**10 x 1 = 10**

1. Microteaching is \_\_\_\_\_ teaching. CO1 K1  
a. scaled down      b. effective      c. real      d. evaluation
2. Micro teaching is more effective CO1 K2  
a. always      b. after the teaching-practice  
c. during the teaching-practice      d. during the preparation for teaching-practice
3. Students are passive in \_\_\_\_\_ method. CO2 K2  
a. project      b. lecture      c. inquiry      d. demonstration
4. Heuristic means CO2 K3  
a. to investigate      b. to show      c. to do      d. to act
5. Symposium is a type of \_\_\_\_\_ method. CO3 K1  
a. Discovery      b. Discussion      c. Lecture      d. Demonstration
6. Practice is made in \_\_\_\_\_ method. CO3 K2  
a. Inductive      b. Deductive      c. Drill      d. Discussion
7. The expansion of ABL is CO4 K3  
a. Activity Based Learning      b. Action Based Learning  
c. Activity Biassed Learning      d. Action Bring Learning
8. Instructional objectives guide students by helping them to CO4 K2  
a. identify important high level skills      b. discuss the lesson with each other  
c. monitor their own learning      d. create teachable moments
9. Personalized System of Instruction (PSI) is also referred as CO5 K3  
a. Keller Plan      b. Dalton Plan      c. Assignment      d. Homework
10. CAI stands for CO5 K2  
a. Computer Abled Instruction      b. Computer Assisted Instruction  
c. Computer Aided Instruction      d. Computer Aided Inquiry

**Part B**

5 x 6 = 30

**Answer ALL questions****Each answer should not exceed 400 words or two pages**

- 11.a. Define and explain micro teaching cycle. CO1 K2  
(or)
- 11.b. Bring out the meaning, definition and characteristics of microteaching in Mathematics. CO1 K1
- 12.a. Illustrate project method of teaching Mathematics. CO2 K2  
(or)
- 12.b. List out the principles of Heuristic method of teaching Mathematics. CO2 K3
- 13.a. Mention the importance of drill and quiz in the learning of Mathematics. CO3 K3  
(or)
- 13.b. Write a short note on Supervised Study. CO3 K3
- 14.a. Differentiate unit plan and lesson plan (any six). CO4 K2  
(or)
- 14.b. Explain ABL as a constructivism approach in teaching of Mathematics. CO4 K2
- 15.a. Write about the salient features of Programmed Instruction. CO5 K3  
(or)
- 15.b. Discuss mathematics as a mode of individualised instruction. CO5 K6

**Part C**

5 x 12 = 60

**Answer ALL questions****Each answer should not exceed 800 words or four pages**

- 16.a. Explain the skill of stimulus variation with an episode. CO1 K2  
(or)
- 16.b. Explain the components of skill of reinforcement with an episode. CO1 K2
- 17.a. Enlighten the importance of lecture cum demonstration method with an example. CO2 K1  
(or)
- 17.b. List the projects related to secondary and higher secondary Mathematics. CO2 K3
- 18.a. Distinguish Seminar, Symposium and Workshop in teaching of Mathematics. CO3 K2  
(or)
- 18.b. Discuss the role of Oral work, Group work and Homework in teaching of mathematics. CO3 K6
- 19.a. Prepare a detailed lesson plan to teach a unit from Mathematics. CO4 K6  
(or)
- 19.b. Enumerate and explain the significance, steps, format in preparing a lesson plan. CO4 K1
- 20.a. Highlight the nature and characteristics of CAI. CO5 K5  
(or)
- 20.b. Prepare linear and branching programme on any topic of Mathematics. CO5 K6

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