Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category A by MHRD, Estd. u/s 3 of UGC Act 1956)
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/HI) Degree Examination – June / July 2021
II Semester

Class: I B.Ed./ I B.Ed. Special Education (VI/HI) **Time : 3 Hours**
Max. Marks : 100

18BEDM12 / 18BDSM12 School Subject I: Methods and Techniques of Teaching Mathematics

Course Outcomes:
CO1: Develop competency in teaching skills
CO2: Choose appropriate methodology for teaching mathematics
CO3: Analyse various techniques for teaching mathematics
CO4: Plan daily lesson for teaching mathematics
CO5: Design yearly, term, monthly and weekly plan
CO6: Construct auto instructional material for teaching mathematics

Part A **10 x 1 = 10**
Choose the Correct Answer

1. The five stepped system of lesson planning was started by **CO2 K1**
   a. Herbert b. Kilpatrick
   c. Morrison d. none of the above

2. Meaning of the word " Heurisco" is **CO1 K1**
   a. to know b. to learn
   c. to think d. to find out

3. Project method was advocated by **CO2 K1**
   a. Kilpatrick b. Gagne
   c. Dewey d. Ballard

4. Time period for microteaching session is **CO1 K1**
   a. 10-20 min b. 5-6 min
   c. 10-15 min d. 40-50 min

5. Heuristic method is one of the methods under **CO3 K2**
   a. Student- centred b. Teacher- centred
   c. Society- centred d. none of the above

6. Appropriate method for teaching biography of mathematicians is **CO1 K1**
   a. project b. demonstration
   c. lecture d. problem solving

7. Exercises provided in an individual basis according to the capacity of the student is the technique of **CO2 K1**
   a. Drill b. Seminar
   c. Symposium d. Workshop

8. Evocation, Recall, Survey are the steps in the mathematics class to be followed in **CO1 K1**
   a. ABL b. PLM
   c. ALM d. CAI

9. CAI Stands for **CO6 K1**
   a. Computer Assisted Instruction b. Computer Artificial Intelligence
   c. Computer Analysis Instruction d. Computer Applied Instruction

10. PLM stands for **CO6 K1**
   a. Programmed Learning Method b. Programmed Learning Material
   c. Personal Learning Method d. Personal Logic Material

Part B **5X6 = 30**

Answer ALL questions

Each answer should not exceed 400 words or two pages

11.a. Define Microteaching and list out the characteristics of microteaching. **CO1 K1**

(or)

11.b. Draw the microteaching cycle. **CO2 K2**

12.a. List out the advantages and disadvantages of heuristic method in teaching mathematics. **CO2 K1**

(or)

12.b. Explain problem solving method in teaching of mathematics. **CO2 K2**

13.a. Describe the importance of supervised study. **CO3 K3**

(or)

13.b. Suggest some ways to develop speed and accuracy among students. **CO6 K5**

14.a. Describe the steps in Herbartian approach to lesson planning. **CO4 K2**

(or)

14.b. What is the difference between Year Plan and Unit Plan? **CO5 K2**

15.a. Mention the modes of CAI in mathematics. **CO3 K3**

(or)

15.b. Explain PSI. **CO6 K2**

Part C **5X12 = 60**

Answer ALL questions

Answer should not exceed 800 words or four pages

16.a. Explain any three micro teaching skills necessary for teaching of Mathematics. **CO1 K2**

(or)

16.b. List out the components of skill of explaining and write an episode. **CO1 K2**

17.a. Explain demonstration method with examples in teaching mathematics. **CO2 K2**

(or)

17.b. Write down the steps involved in project method. List out the projects related to secondary and higher secondary level. **CO1 K1**

18.a. Discuss in detail how seminars and workshops can be effective in Professional growth of teachers. **CO2 K2**

(or)

18.b. Analyze various techniques for teaching of mathematics. **CO4 K3**

19.a. Describe the components of a Lesson Plan. Write a Lesson Plan on any topic of your choice from Standard IX Mathematics. **CO2 K3**

(or)

19.b. Explain the principles involved in Activity Based Learning (ABL). Differentiate ABL and ALM. **CO4 K2**

20.a. Prepare Linear model of Programmed Instruction for teaching of mathematics. **CO6 K3**

(or)

20.b. Explain Branching and mathematics model of instruction with examples. **CO6 K2**

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