



**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)**

**Time : 3 hours**  
**Max. Marks : 100**

**18BEDB12 School Subject I: Methods and Techniques of Teaching Biological Science**

**Course Outcomes:**

CO1: develop skills for effective teaching

CO2: know the importance of various methods and techniques of teaching biological science

CO3: develop skill in preparing and using appropriate instructional material in biology teaching

CO4: plan and write the lesson plans

CO5: prepare individualised instructional materials

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

**10 x 1 = 10**

- |  |                   |                       |                      |            |           |
|--|-------------------|-----------------------|----------------------|------------|-----------|
| 1. Microteaching is a  |                   |                       |                      | <b>CO1</b> | <b>K2</b> |
| a. Teaching training technique   |                   | b. Teaching method    |                      |            |           |
| c. Motivational training technique   |                   | d. None of the above  |                      |            |           |
| 2. The duration of a lesson in a microteaching is                                  |                   |                       |                      | <b>CO1</b> | <b>K1</b> |
| a. 1 - 5 mts   | b. 5 – 10 mts     | c. 10 -15 mts         | d. 15 – 20 mts       |            |           |
| 3. The method of teaching is determined on the basis of                            |                   |                       |                      | <b>CO2</b> | <b>K2</b> |
| a. Content   | b. Objective      | c. level of education | d. All the above     |            |           |
| 4. Students remain passive in  |                   |                       |                      | <b>CO2</b> | <b>K2</b> |
| a. Project method  | b. Lecture method | c. Discovery method   | d. Inquiry method    |            |           |
| 5. The brain storming technique of teaching was designed by                        |                   |                       |                      | <b>CO3</b> | <b>K1</b> |
| a. Osburn  | b. Kilpatric      | c. B.F. Skinner       | d. Bloom             |            |           |
| 6. The style is adopted in role playing strategy of teaching is                    |                   |                       |                      | <b>CO3</b> | <b>K4</b> |
| a. Authoritative   | b. Permissive     | c. Submissive         | d. None of the above |            |           |
| 7. The specific objective evaluation is included in which of the following domain? |                   |                       |                      | <b>CO4</b> | <b>K1</b> |
| a. Cognitive   | b. Affective      | c. Psychomotor        | d. None of the above |            |           |
| 8. Planning a lesson should proceed from psychological to                          |                   |                       |                      | <b>CO4</b> | <b>K2</b> |
| a. social  | b. logical        | c. personal           | d. None of the above |            |           |
| 9. Branched Programmed Instruction was introduced by                               |                   |                       |                      | <b>CO5</b> | <b>K1</b> |
| a. B.F. Skinner  |                   | b. Norman A. Crowder  |                      |            |           |
| c. John Dewey  |                   | d. Jean Piaget        |                      |            |           |
| 10. PSI was developed by   |                   |                       |                      | <b>CO5</b> | <b>K1</b> |
| a. Kilpatric   | b. John Dewey     | c. F. S. Keller       | d. Skinner           |            |           |

**Part B**

**5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

- 11.a. Describe the microteaching cycle. **CO1 K2**  
(or)
- 11.b. Define link lesson and state the need for it. **CO1 K1**
- 12.a. Elucidate the features of lecture cum demonstration method stating its merits and demerits. **CO2 K4**  
(or)
- 12.b. Comment on the appropriate use of biographical and historical method of teaching in biology. **CO2 K3**
- 13.a. What is team teaching? List the facilities needed for organising team teaching. **CO2 K2**  
(or)
- 13.b. Differentiate seminar and symposium as distinct techniques of teaching biology. **CO2 K4**
- 14.a. Enumerate the characteristics of a good unit plan. **CO4 K4**  
(or)
- 14.b. Explain the herbartian steps in lesson planning. **CO4 K2**
- 15.a. Explain the basic principles of programmed instruction. **CO5 K2**  
(or)
- 15.b. Describe how effectively self-learning could be utilized in biology. **CO5 K3**

**Part C**

**5 x 12 = 60**

**Answer ALL questions**

**Each answer should not exceed 800 words or fourpages**

- 16.a. Explain the skill of reinforcement and skill of questioning indicating their components. **CO1 K2**  
(or)
- 16.b. Write a micro lesson plan for practising the skill of stimulus variation taking a suitable topic from biology and describe the procedure. **CO1 K6**
- 17.a. What is Scientific method? Illustrate with suitable example the various steps involved in the scientific method. **CO2 K2**  
(or)
- 17.b. Discuss the utility of internet in learning biology. **CO2 K3**
- 18.a. Compare the inductive and deductive approaches in teaching of biology. Mention their relative merits and demerits. **CO3 K4**  
(or)
- 18.b. Justify brain storming as an effective technique for teaching biology. **CO3 K5**
- 19.a. Analyze the theoretical basis for writing instructional objectives in lesson planning. **CO4 K4**  
(or)
- 19.b. Develop a format of a lesson plan for a topic in biology following herbartian steps. **CO4 K6**
- 20.a. What is personalized system of instruction? Explain its salient features. **CO5 K2**  
(or)
- 20.b. Elaborate Computer Assisted Instruction in teaching of biology. **CO5 K2**

\*\*\*\*\*