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Reg. No. : ......

Name : ......

First Semester B.Ed. Degree Examination, August 2021

EDU 04.9 : THEORETICAL BASE OF NATURAL SCIENCE EDUCATION

(2019 Admission onwards)

Time: 2 Hours Max. Marks: 50

PART - A

## Answer all questions:

- 1. Which of the following is apt to handle a controversial topic in class room.
  - (a) Seminar

(b) Group discussion

(c) Debate

- (d) Peer tutoring
- 2. Constructivist learning is advocated by
  - (a) Jean Piaget

(b) Lev Vygosky

(c) B.F. Skineer

- (d) Kohler
- 3. The two dimensional matrix in Revised Bloom's taxonomy include
  - (a) Application and Analysis
  - (b) Evaluation and comprehension
  - (c) Knowledge and Cognitive Process
  - (d) Imitation and Articulation

4. Which of the following is not an objective of cognitive domain?					
	(a)	Analysis	(b)	Receiving	
	(c)	Synthesis	(d)	Evaluation	
5.	The technique of learning put forward by Joseph D. Novak (1970)				
	(a)	Peer Tutoring	(b)	Team Teaching	
	(c)	Brain Storming	(d)	Concept Mapping	
					$(5 \times 1 = 5 \text{ Marks})$
PART – B					
Answer all questions not exceeding one or two sentences.					
6.	What is Scaffolding?				
7.	What is sustainable development?				
8.	What do you mean by objective based instruction?				
9.	Define Geo informatics				
10.	What is specification?				
					$(5 \times 1 = 5 \text{ Marks})$
PART – C					
Answer all questions in three or four sentences.					
11.	What are the advantages of multimedia approach?				
12.	Write the objectives under Psychomotor domain.				
13.	Hov	v does biology related to envir			
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- 14. Explain heuristic method of teaching.
- 15. What is process approach in science?

 $(5 \times 2 = 10 \text{ Marks})$ 

## PART – D

Answer any four questions not exceeding 2 pages.

- 16. Discuss the interdisciplinary approach and state its advantages.
- 17. Briefly explain the concept of classroom with respect of Virtual learning Environment.
- 18. Define scientific attitude. Explain how can you develop scientific attitude in pupils.
- 19. Explain the steps of project method with suitable examples.
- 20. Write a note on the contribution of Watson and Crick.
- 21. Discuss the significance of Continuing Professional Development (CPD).

 $(4 \times 5 = 20 \text{ Marks})$ 

## PART - E

Answer **any one** questions not exceeding **4** pages.

- 22. What is constructivism? Discuss the characteristics of a constructivist classroom and the role of teacher and learner in these context.
- 23. Explain the Mc Cormack and Yager's taxonomy of teaching and learning science in 1989.

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 $(1 \times 10 = 10 \text{ Marks})$ 

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