H - 2738(Pages: 4) Reg. No.:.... Name: First Semester B.Ed. Degree Examination, November 2019 **EDU 04.9: THEORETICAL BASE OF NATURAL SCIENCE EDUCATION** (2019 Admission) Time: 2 Hours Max. Marks: 50 PART – A Answer all questions: 1. A general statement which establishes the relationship between at least two concepts is called (a) Generalisation (b) Principle (c) Fact (d) Theory 2. **ZPD** means (a) Zone of potential development (b) Zone of proximal development

(c) Zone of personal development

(d) Zone of principal development

3.	Who	among the following is associated with project method.
	(a)	W.H. Kilpatrick
	(b)	Howard Gardner
	(c)	David P Ausubel
	(d)	Jean Piaget
4.	Orc	der of <u>nucleotides</u> in <u>nucleic acids</u> was traced by
	(a)	Charles Darwin
	(b)	M S Swaminathan
	(c)	Har Gobind Khorana
	(d)	Gregor Johan Mendal
5.	Whi	ch of the following is not an objective under psychomotor domain
	(a)	Manipulation
	(b)	Articulation
	(c)	Characterisation
	(d)	Naturalization

PART – B

 $(5 \times 1 = 5 \text{ Marks})$

Answer **all** questions not exceeding one or two sentences

- 6. Distinguish between inductive and deductive method.
- 7. What is scientific literacy?
- 8. What is peer tutoring.

- 9. Define Nano technology.
- 10. Explain maxims of teaching with one example.

 $(5 \times 1 = 5 \text{ Marks})$

PART - C

Answer **all** questions in three to four sentences.

- 11. Bring out any four difference between behaviourism and constructivism in learning.
- 12. Write the objectives under Cognitive domain.
- 13. Write any four advantages of lecture cum Demonstration method.
- 14. Discuss the contributions of Dr Salim Ali.
- 15. Explain different steps in brain storming technique.

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

PART – D

Answer **any four** questions not exceeding two pages

- 16. What is scientific method? What are the steps involved in scientific method?
- 17. How will you organize a seminar in your classroom?
- 18. 'Science is both process and product' Critically examine this statement.
- 19. Write the importance Professional growth of Science Teachers.
- 20. Explain the significance of using multimedia in teaching biology.
- 21. State the importance of Bioinformatics.

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

PART – E

Answer any one questions not exceeding four pages

- 22. Mention the important national goals of teaching natural science. Explain the need for creating an awareness about the millennium development goals among learners
- 23. Explain the Revised Bloom taxonomy of educational objectives by Anderson and Krathwohl(2001)

(1×1)	0 = 10	Marks)