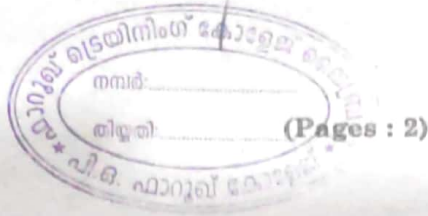


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Name.....

Reg. No.....

**FIRST SEMESTER B.Ed. DEGREE EXAMINATION, NOVEMBER 2019**

**B.Ed.**

**EDU 05.11—THEORETICAL BASES OF TEACHING NATURAL SCIENCE**

**(2017 Admissions)**

**Time : Three Hours**

**Maximum : 80 Marks**

**Part A**

*Answer all questions.*

*Each question carries 2 marks.*

1. Define 'Scientific Literacy'. Mention any two ways to promote it.
2. What is *Heuristic Method* ? Who proposed it ?
3. What do you mean by *Misconceptions* in Science ? Give one example.
4. What is 'Critical Pedagogy' ? Who envisaged it ?
5. Write any four principles of *Curriculum construction*.
6. Distinguish between *Behaviorism* and *Constructivism*.
7. What is *Social Constructivism* ? Who proposed the theory ?
8. What is *Jig-Saw* technique in teaching ? Write any two merits of it.
9. Mention any four features of showing *Scientific Attitude*.
10. Write any four *Objectives* of *NCF (2005)*.

(10 × 2 = 20 marks)

**Part B**

*Answer any ten questions.*

*Each question carries 4 marks.*

11. What are *Teaching Skills* ? Explain any two *Core-Teaching Skills* in teaching *Biology*.
12. What are *Projects* ? Explain the main steps of doing a Project with a suitable example from *Biology*.
13. What is *Cognitive Constructivism* ? Explain the theory of *Genetic Epistemology* proposal by Jean Piaget.
14. Briefly explain *Syntax of Inquiry Training Model* with an example.
15. What is *Brain Storming* ? How will you *Organize* a brain storming session in your classroom ?

**Turn over**

16. What are *Science Process Skills* ? Briefly explain the *strategies* to develop the process skills among the learners.
17. What is *Dalton Plan* ? Explain the significance.
18. Explain the steps of *Scientific Method*.
19. Briefly explain the major role of *Nuffield Foundation* in the field of curricular reformation.
20. Briefly explain the various *duties* of a Science teacher in promoting *scientific values*.
21. Distinguish between *Incidental Correlation* and *Systematic Correlation* with suitable examples.
22. What is BSCS ? Explain the *Nine unifying themes* suggested by BSCS.

(10 × 4 = 40 marks)

### Part C

*Answer any two questions.  
Each question carries 10 marks.*

23. Define *Micro-Teaching*. Explain the major steps of *Micro Cycle*. Discuss its *Scope* and *Relevance* as an effective *Training Technique* for teacher training programme.
24. Define *Curriculum*. Explain the major *Approaches* in organizing a suitable *Science curriculum*. Discuss the advantages of various approaches in *Curriculum*.
25. Briefly explain the *Nature* and *Scope* of teaching *Science* with special reference to teaching *Natural Science*.

(2 × 10 = 20 marks)