D 92534

(Pages: 2)



FIRST SEMESTER B.Ed. DEGREE EXAMINATION, DECEMBER 2015

EDU 05.11—THEORETICAL BASES OF TEACHING NATURAL SCIENCE

(2015 Admissions)

Time: Three Hours

Maximum: 80 Marks

Part — A: Answer all question, 2 marks for each question.

Part — B: Answer any ten questions, 4 marks for each question.

Part — C: Answer any two questions, 10 marks for each question.

Part A

Answer all questions. Each carries 2 marks.

- 1. What is meant by 'scaffolding'.
- 2. What are the advantages of pupils work book.
- 3. Whate is collaborative learning?
- 4. What is brainstorming.
- 5. Give two merits and demerits of lecture method.
- 6. List out any four objectives of Nuffield science teaching project.
- 7. To the 'learned' deduction comes naturally, but for the learner induction is the way. Explain.
- 8. Give two examples for analytical diagrams.
- 9. What is concentric syllabus.
- 10. State any four issues mentioned in the KCF(2007

 $(10 \times 2 = 20 \text{ marks})$

Part B

Answer any ten questions. Each carries 4 marks.

- 11. How Biology can be successfully correlated with other School subjects? Explain.
- 12. Write the qualities of a person with scientific attitude. How will you develop scientific attitude among your students?
- 13. Describe the fundamental principles of constructivism.
- 14. Explain the characteristics of a good Science text-book.
- 15. "The art of questioning is the very soul of teaching" comment.
- 16. Explain the various approaches of biological science in curriculum organization.
- 17. What is scientific literacy? How can this help in the development of an individual and society as a whole.

Scanned with CamScanner

- 18. Seminars are effective instructional strategies in teaching science. Why?
- 19. Explain how enquiry approach could be utilized in the teaching of biology?
- 20. Mention any five essential requirements of a Biology laboratory.
- 21. What are misconceptions in science? cite one example for a misconception in biology. How will, you handle this situation?
- 22. Illustrate 'science as an ongoing process of enquiry'.

 $(10 \times 4 = 40 \text{ marks})$

Part C

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

- 23. Understanding the nature of discipline is of utmost importance in the transaction of curriculum. Being a teacher, substantiate this statement in terms of process and product aspect of science teaching.
- 24. How will you make use of various audio-visual aids as learning resources to enhance effectiveness in the teaching of Biology.
- 25. Explain the project method of teaching with the help of a suitable example from biology.

 $(2 \times 10 = 20 \text{ marks})$