(Pages: 2)

First Semester B.Ed. (Restructured) Degree Examination, March 2007 B - Optional Subjects

Paper - IV - THEORETICAL BASE OF TEACHING NATURAL SCIENCE

Time: 2 Hours

Max. Marks: 50

- I. Answer two questions (not exceeding three pages each):
 - 1) Effecting social change is one of the broad aims of teaching Natural Science. Briefly explain how this could be achieved.
 - 2) Explain the nature and scope of Biology. Bring out the relationship of Biology with other school subjects.
 - 3) Justify the need for planning in the teaching of Biology. Explain the objectives and types of planning.
 - 4) 'Micro-teaching is a scaled down teaching encounter'. Discuss. (2×8=16 Marks)
- II. Answer six questions (not exceeding one page each):
 - 5) What is a resource unit? How is it different from a teaching unit? What are its advantages?
 - 6) Use of audio-visual aids supports effectiveness of Biology teaching. Illustrate.
 - 7) What are the precautions to be borne in mind while planning practical work?
 - 8) Bring out the difference between teacher-centred and pupil-centred learning.
 - 9) Briefly explain the taxonomy of educational objectives put forward by McCormack and Yager.
 - Explain the different types of biological drawings.
 - 11) Mention the names of two eminent Indian biologist and give their contributions.
 - 12) Explain the concept of science as a product.

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- 13) Comment on construction as generating knowledge by students.
- 14) Why is self-study approach better than reception learning? (6×4=24 Marks)

III. Answer all questions in one or two sentences each:

- 15) Specify any two advantages of using models in teaching biology.
- 16) Through an example distinguish between objective and specification.
- 17) How will you prepare your pupils for a radiolesson?
- 18) What techniques are recommended for accelerating the fast learner? What enrichment programmes are possible within the present set up?
- 19) State two specification for the objective 'Appreciation'.
- 20) What is the advantage of flannel board over chalkboard?
- 21) To the learned, deduction comes naturally but to the learner induction is the way. Explain.
- 22) What is a terrarium?
- 23) What are the components of multimedia?
- 24) What is a diorama?

(10×1=10 Marks)