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(Pages : 2)

Name.....

Reg. No.....

THIRD SEMESTER M.Ed. DEGREE EXAMINATION, DECEMBER 2021

M.Ed.

MED 12.2.10—ADVANCED METHODOLOGY OF TEACHING NATURAL SCIENCE

(2017 Scheme)

Time : Three Hours

Maximum : 80 Marks

I. Short Answer Type/Annotation Questions. Answer *all* questions. Each question carries 2 marks :

- 1 What is meant by scientific explanation ?
- 2 What is meant by brain-based learning ?
- 3 Differentiate co-operative and collaborative learning.
- 4 Write any *two* uses of peer assessment.
- 5 Give a brief note on ERIC.

(5 × 2 = 10 marks)

II. Short Essay Type Questions/Problems. Answer any *eight* questions out of twelve. Each question carries 5 marks :

- 6 Differentiate the following vocabulary terms in science - terms and concepts, hypotheses, principles, theories and laws.
- 7 Science as a social endeavour—Comment.
- 8 What are the common misconceptions of pupils about the nature of science ?
- 9 What does BSCS stand for in Education ? Explain 5E instructional model.
- 10 What is the importance of scientific enquiry as given in KCF 2007 ?
- 11 What is the importance of field trips in a well-rounded education ?
- 12 Briefly explain the components of models of teaching ?
- 13 What is the importance of Bloom's taxonomy of educational objectives ? What are six levels revised version of Bloom's Taxonomy.
- 14 What are the key benefits of CCE ?
- 15 Highlights the advantages of using rubrics as assessment tool for academic task.

Turn over

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- 2.
- 16 Define ICT integrated pedagogy. How do you use Blogs in natural science teaching?
- 17 What is the importance of professional development for teachers?

(8 × 5 = 40 marks)

III. Long Essay Type Questions. Answer any *two* questions out of four. Each question carries 15 marks :

- 18 Elaborate new trends in science education.
- 19 What is guided discovery method? Describe the steps necessary in developing successful guided-discovery problems.
- 20 Describe the various tools and techniques for continuous evaluation and terminal evaluation.
- 21 Substantiate how various ICT resources can effectively be used for natural science teaching.

(2 × 15 = 30 marks)