D 33130

THIRD SEMESTER M.Ed. DEGREE EXAMINATION, DECEMBER 2022

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 Mention any two common misconceptions of pupils about the nature of science.
 - 2 Give a short note on flipped learning.
 - 3 Give a brief note on integrative approach.
 - 4 What is portfolio of science learning?
 - 5 What is Greenhouse?

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

- II. Short Essay Type Questions/Problems. Answer any *eight* questions out of twelve. Each question carries 5 marks:
 - 6 Science as a dynamic expanding body of knowledge-comment.
 - 7 'Science and Technology complement each other' justify this statement with example.
 - 8 What is STEM Education? What is its relationship with 21st century skills?
 - 9 Discuss the six criteria suggested by NCF 2005 for validate science curriculum.
 - 10 Give a note on Nuffield Science Project.
 - 11 Give a short note on (i) Constructivist strategies; and (ii) Discovery approach.
 - What is concept mapping method of teaching? What are the steps involved in concept mapping?
 - 13 What are the phases of concept attainment model? Writes its instructional and nurturant effects.
 - 14 Enumerate the six aspects of Fink's taxonomy of significant learning.

Turn over

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- What is co-scholastic assessment? How do you use check list and inventories for coscholastic assessment?
- What are the benefits of going to a Science Museum?
- 17 Write a note on Consortium for Educational Communication-UGC.

 $(8 \times 5 = 40 \text{ marks})$

- III. Long Essay Type Questions. Answer any two questions out of four. Each question carries 15 marks:
 - 18 Why science is a social Endeavour? Explain with example.
 - 19 Elaborate the vision suggested by NCF 2005 with regard to science curriculum.
 - Write the syntax of inquiry training model. How can you effectively use this model for science teaching?
 - 21 What is Portfolio? Explain the stages in implementing portfolio assessment.

 $(2 \times 15 = 30 \text{ marks})$