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(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER M.Ed. DEGREE EXAMINATION, NOVEMBER 2019**

M.Ed.

**MED 12.2.9—ADVANCED METHODOLOGY OF TEACHING PHYSICAL SCIENCE**

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

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

- 1 What is inertia ?
- 2 Mention any 2 instructional materials in Physical Science.
- 3 What is Guided Discovery Approach ?
- 4 Identify any two areas in Physical Science for Research.
- 5 Mention any two service conditions of School Teachers.

(5 × 2 = 10 marks)

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

- 6 Why teaching is considered as a Profession ?
- 7 Explain the concept of Professional Development.
- 8 Describe any two recent innovations in Science.
- 9 Why research is needed in Physical Science Education ?
- 10 As a Physical Science Teacher, how would you plan for laboratory works ?
- 11 Explain collaborative learning in Science with illustration.
- 12 What is the application of Vygotsky's theory of teaching and learning of Physical Science ?
- 13 Explain the theory of Piaget on learning Science.
- 14 Bring out the criteria of a good Science text book.
- 15 Discuss the trends in Physical Science Education at International Level.
- 16 Explain the steps in Scientific Method.
- 17 With an illustration in Physical Science. Explain the formula of Hypothesis.

(8 × 5 = 40 marks)

**Turn over**

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

- 18 Outline the history of Evolution of Science as a Discipline.
- 19 Write note on NCF 2005 and KCF 2007 with regard to Physical Science Education.
- 20 Describe the critical Pedagogy by Paulo Freire.
- 21 Discuss the changing roles and responsibilities of Science Teacher.

(2 × 15 = 30 marks)