

**F 4598**

(Pages : 2)

Reg. No.....

Name.....

**B.Ed. (CREDIT AND SEMESTER) DEGREE EXAMINATION, DECEMBER 2016**

**First Semester**

Pedagogic Course

**EDU 104.17—UNDERSTANDING THE DISCIPLINE OF PHYSICAL SCIENCE  
EDUCATION**

(2015 Admission onwards (Two Year Course))

[Regular/Supplementary]

Time : Two Hours

Maximum : 50 Marks

**Part A**

*Answer all questions in one or two sentences each.*

*Each question carries 1 mark.*

1. What is the most important characteristic of Modern Science ?
2. Give any *one* major contribution of the scientist Stephen Hawking.
3. Give any *two* specifications under the objective "Application".
4. Give any *one* reason for teaching Science to small children.
5. List any 4 skills required while learning science.
6. How does society influence the aims of teaching science ?
7. Define scientific temper.
8. Define critical pedagogy.
9. Write any *one* difference between social and cognitive constructivism.
10. List any *two* approaches in learning congruent to constructivist style of teaching.

(10 × 1 = 10 marks)

**Part B**

*Answer any five questions in about half a page each.*

*Each question carries 2 marks.*

11. What is the necessity of interdisciplinary subjects in Science ?
12. What is "specification" ?
13. Illustrate with an example to prove that objectivity is a characteristic of a student with scientific attitude.

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14. Explain the moral value of Science.
15. How can you identify students with scientific creativity ?
16. What is the difference between incidental and systematic correlation ?

(5 × 2 = 10 marks)

### Part C

*Answer any five questions in about one page each.  
Each question carries 4 marks.*

Explain the nature of Science :

17. How is genetic epistemology connected with constructivist style of teaching?
18. Explain the relevance of teaching the history of Science with an example.
19. Define scientific literacy. List 6 characteristics of a scientifically literate person.
20. How is evaluation made objective based ?
21. Describe the Banking Concept of Education.
22. How is Vygotsky related to constructivism ?
23. Explain the reciprocal relationship between Science and Society.

(5 × 4 = 20 marks)

### Part D

*Answer any one question in about four pages.  
The question carries 10 marks.*

24. Illustrate the interdependency of the process and product aspect of Science.
25. How is cognitive and social constructivism reflected in the classroom teaching in Kerala. Make a critical evaluation.

(1 × 10 = 10 marks)