

B.Ed. (CREDIT AND SEMESTER) DEGREE EXAMINATION, JUNE 2017**Second Semester****EDU 204.17—PEDAGOGICAL DIMENSIONS OF PHYSICAL SCIENCE****(Regular/Supplementary—2015 Admission onwards)**

Time : Two Hours

Maximum : 50 Marks

Part A*Answer all questions in one or two sentences each.**Each question carries 1 mark.*

1. Give any *one* aim of Science Education.
2. List the instructional objectives under affective domain.
3. What is a lesson plan ?
4. List the Herbartian steps of lesson planning.
5. Give any *two* differences between summative and formative evaluation.
6. Give the name of an online assessment tool. Also give the website address (URL) from which it can be obtained.
7. Give any *two* advantages of a smart board over the conventional chalk board.
8. Write any *two* drawbacks of a teacher who is not a techno-pedagogue.
9. How will you distinguish a concept from a fact in content analysis ?
10. Give any *two* differences between current electricity and static electricity ?

(10 × 1 = 10 marks)

Part B*Answer any five questions in about half a page each.**Each question carries 2 marks.*

11. Explain competence based instruction.
12. Why should a student teacher do content analysis as part of the lesson plan ?
13. What is the advantage of having a year plan ?
14. List any 4 criteria for evaluating teaching competence.

Turn over

15. What is the relevance of Techno Pedagogic Content Knowledge in Higher Secondary School teaching ?
16. Give an application of zeroth law of thermodynamics and prepare the blackboard summary for teaching the same.

(5 × 2 = 10 marks)

Part C

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

17. Give the example of a self assessment tool and illustrate its use in detail.
18. Explain redox reactions with examples, chemical equations and symbolic representations.
19. How can you incorporate assessment and evaluation in web based learning ?
20. Explain the conduct of a seminar in a classroom. Also give the criteria of evaluation.
21. How can the techno pedagogic approach integrated with the constructivist approach. Illustrate with an example.
22. How can you apply the spirit of Gardner's theory of Multiple Intelligence in class room ? Illustrate with operational examples.
23. What is objective based instruction ? How can you ensure that your instruction is objective based ?

(5 × 4 = 20 marks)

Part D

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

24. Prepare a diagnostic test to diagnose errors associated with any two concepts in Physics or Chemistry at high school level.
25. Discuss the merits and demerits of continuous comprehensive evaluation system presently practiced in Kerala State School System.

(1 × 10 = 10 marks)