



(Pages : 3)

C – 1731

Reg. No. :

Name :

Second Semester B.Ed. Degree Examination, April 2017
EDU 10.08 : TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS
PHYSICAL SCIENCE
(2015 Admission)

Time : 2 Hours

Max. Marks : 50

PART – A

Select the most **appropriate** option from those given in **brackets**. (5×1=5 Marks)

1. According to Piaget, ego centrism in the thinking of young children is best explained as
 - a) Logical thinking
 - b) Illogical thinking
 - c) Limited thinking
 - d) Self centered thinking
2. Which of the following is not the contribution of Bruner.
 - a) Spiral curriculum
 - b) Discovery learning
 - c) Mastery learning
 - d) Constructivist learning
3. Which of the following refers to Pedagogical Content Knowledge.
 - i) Knowledge of misconceptions and pre conceptions.
 - ii) Knowledge of constraints and technology.
 - iii) Knowledge of concepts and theories.
 - iv) Knowledge of how to make a subject matter understandable.

a) i, ii b) ii, iii c) i, iii d) i, iv
4. The phase of 5 E instructional model that helps to develop deeper understanding so as to extend new concepts/skills is called
 - a) Engagement
 - b) Exploration
 - c) Elaboration
 - d) Evaluation
5. Learning is NOT a Stimulus Response Conditioning but a cognitive process is the idea of
 - a) Bruner
 - b) Gagne
 - c) Piaget
 - d) Vygotsky

P.T.O.



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-2-



PART – B

Answer **all** questions in **one** word/phrase/sentence.

(5×1=5 Marks)

6. Expand VICTERS.
7. What is Multiple Discrimination ?
8. Suggest two ways to promote linguistic intelligence in students.
9. Name any two models of teaching that come under information processing model.
10. Explain Scaffolding.

PART – C

Answer **all** questions in **not** exceeding **one** paragraph.

(5×2=10 Marks)

11. Explain the role of a teacher in Inquiry Training Model.
12. Differentiate between Cognitive Constructivism and Social Constructivism.
13. What steps will you take to improve critical thinking in students ?
14. Suggest suitable instructional strategies to foster creativity in students.
15. Bring out the relevance of networking in a science classroom.

PART – D

Answer **any four** questions in **not** exceeding **one** and a **half** page.

(4×5=20 Marks)

16. What do you mean by a competency ? How can you develop Techno Pedagogic competencies in your students ?
17. Explain the five types of learning according to Gagne.
18. What do you mean by a Concept ? Explain the elements of a Concept.



- 19. Write a short note on Science Teaching in Developing Countries.
- 20. Explain with suitable frames how a concept in science can be introduced through Branched Programming.
- 21. Discuss the role of CAI and CMI in a science classroom.

PART - E

Answer **any one** question in **not** exceeding **three** pages.

(1×10=10 Marks)

- 22. Traditional learning process has been replaced by E learning. Critically examine this statement and bring out the importance of IT in Science education. Write a short note on e-Twinning.
- 23. Acquiring techno-pedagogical proficiency will make teaching and learning a pleasurable exercise. Explain the TPACK framework and show how a teacher can prepare the students for the digital future.