J - 4560(Pages : 3) Reg. No.: Name: Second Semester B.Ed. Degree Examination, April 2020 **EDU-10.8: TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS –** PHYSICAL SCIENCE (2019 Admission) Time: 2 Hours Max. Marks: 50 PART - A Choose the correct answer. Answer **all** questions. Each question carries **1** mark. The teacher presents Positive examples and Negative examples for teaching the 1. content Isomers while using the model of teaching (a) Inductive Thinking Model (b) Concept Attainment Model (c) Inquiry Training Model (d) Advance Organizer Model Zone of Proximal Development is the concept of 2. (a) Jerome S. Bruner (b) Jean Piaget (d) L. Vygotsky (c) Howard Gardner 3. Scrambled text is associated with **Computer Assisted Instruction** (a) (b) Linear Programmed instruction (c) Branched Programmed Instruction Modular Instruction (d)

- 4. Which one of the following come under Gardners Multiple Intelligence?
 - (a) Spiritual intelligence

(b) Emotional intelligence

(c) Verbal intelligence

(d) Social intelligence

- 5. Which one of the following is not a scope of Techno Pedagogy?
 - (a) Rote learning

(b) Collaborative learning

(c) Creative learning

(d) Evaluative learning

 $(5 \times 1 = 5 \text{ Marks})$

PART - B

Answer **all** questions. Answer in **1** word or sentence. Each question carries **1** mark.

- 6. Write the expansions of TPACK.
- 7. Name any two self instructional strategies that can be adopted in a Science class room.
- 8. Give any one example of digital resources.
- 9. What do you know about Samagra.
- 10. What is the significance of blog in science learning?

 $(5 \times 1 = 5 \text{ Marks})$

PART - C

Answer all questions. Each question carries 2 marks.

- 11. What do you mean by Web streaming?
- 12. Explain any one of the Personalised systems of Instruction.
- 13. What learning activities are to be used to develop creative thinking among your students?
- 14. Write the Advance Organiser that you will provide while developing the lesson on inertia.

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15. List out the important objectives of KITE.

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

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PART - D

Answer any four questions. Each question carries 5 marks.

- 16. Networking has an important role in learning Physical Science in the present context. Substantiate.
- 17. Explain different types of programmed instruction. Is there any relevance for programmed instruction in the Physical Science classroom?
- 18. Write the content to be included in the paper you are going to present in a seminar on Techno pedagogic competencies.
- 19. Explain Gardner's Multiple intelligence theory. Write its implications in science learning.
- 20. Write a note on Science Teaching in Finland.
- 21. Explain any two curriculum approaches used in the organization of Science curriculum.

 $(4 \times 5 = 20 \text{ Marks})$

PART – E

Answer **any one** question. Each question carries **10** marks.

- 22. Prepare a lesson template for a period of 45 minutes for any topic in Physics or Chemistry based on any one of the following:
 - (1) 5E Model
 - (2) Inquiry Training Model.
- 23. Write the important Psychological principles of Bruner's theory of cognitive growth. Suggest strategies for incorporating these principles in Science instruction.

 $(1 \times 10 = 10 \text{ Marks})$

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