



Reg. No. :

Name :

**Second Semester B.Ed. Degree Examination, April 2019
(2015 Scheme)**

**EDU 10.8 : TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS-
PHYSICAL SCIENCE**

Time : 2 Hours

Max. Marks : 50

PART – A

I. Answer **all** questions by selecting the most appropriate one from the options.

- 1) Which of the following model belongs to Information processing family ?
 - a) Role play model
 - b) Advance organiser model
 - c) Jurisprudential model
 - d) Contingency management model
- 2) Who advocated theory of Multiple Intelligence ?
 - a) Vygotsky
 - b) Skinner
 - c) Gardner
 - d) Crowder
- 3) Programmed Instruction is based on which theory of learning ?
 - a) Stimulus-response theory
 - b) Operant conditioning
 - c) Classical conditioning
 - d) Insight theory
- 4) Which of the following acts as a means for instructional and professional growth of teachers ?
 - a) Youtube
 - b) Scope Store
 - c) Twitter
 - d) E-Twinning
- 5) Focus gambling is a strategy identified by
 - a) Gagne
 - b) Piaget
 - c) Bruner
 - d) Vygotsky

(5×1=5 Marks)





II. Answer **all** questions in **one** word or **one** phrase :

- 6) Write the major components of a concept.
- 7) What is meant by bodily-kinesthetic intelligence ?
- 8) Distinguish between instructional effect and nurturant effect of models.
- 9) Give the name of any one blog for learning physical science at secondary level.
- 10) What is meant by OFSET in science teaching ? **(5×1=5 Marks)**

PART – B

Answer **all** questions **not** exceeding in **one** paragraph. **Each** question carries **2** marks.

- 11) Mention any two basic principles of programmed learning.
- 12) Give an account of nurturant effect of concept attainment model.
- 13) What is TPACK ?
- 14) What is E-Twinning ?
- 15) Briefly describe zone of proximal development. **(5×2=10 Marks)**

PART – C

Answer **any 4** questions **not** exceeding in **one and half** pages. **Each** question carries **5** marks.

- 16) Differentiate between linear programming and branched programming.
- 17) Explain the syntax of Inquiry training model.
- 18) How will you support reflective thinking in students ?
- 19) Give the implications of cognitive development theory of Piaget in teaching of science.
- 20) Briefly describe the science education in Australia.
- 21) Teacher as a techno pedagogue-substantiate. **(4×5=20 Marks)**

PART – D

Answer **any one** question **not** exceeding **3** pages. **Each** question carries **10** marks.

- 22) According to constructivist view of learning knowledge is to be constructed. Explain your views on the basis of existing classroom learning.
- 23) Write a lesson plan for any topic based on any one of the following :
 - a) Advance Organiser Model
 - b) Concept Attainment Model



(1×10=10 Marks)