



Reg. No. : .....

Name : .....

**Second Semester B.Ed. Degree Examination, April 2019**  
**EDU 10.7 : TECHNO-PEDAGOGIC CONTENT KNOWLEDGE**  
**ANALYSIS – MATHEMATICS**  
**(2015 Scheme)**

Time : 2 Hours

Max. Marks : 50

**PART – A**

Select the most appropriate answer from brackets. Answer **all** questions :

1. Branched programming was put forward by  
[a) Norman A. Crowder                      b) B. F. Skinner  
c) Dalton                                      d) F. S. Keller]
2. An online platform for the collaboration and professional growth of schools in Europe is  
[a) It @ school project                      b) GURU project  
c) Peer networking                          d) e-twinning]
3. The teacher's knowledge about the science of teaching  
[a) Content knowledge                      b) Pedagogic knowledge  
c) Technological knowledge              d) Previous knowledge]
4. Inquiry training model was put forward by  
[a) Ausubel                                      b) Bruner  
c) Hilda Taba                                  d) Richard Suchman]
5. Which among the following is an online publishing and discussion forum ?  
[a) Geogebra                                      b) Blog  
c) Webcrawler                                  d) Ubundu]

**(5×1=5 Marks)**



P.T.O.



PART – B

Answer **all** questions in **one** or **two** sentences :

6. What is techno pedagogy ?
7. What is meant by instructional effect of a model ?
8. What is a 'frame' in a programmed instruction ?
9. Write two advantages of instructional module.
10. Write two features of maths teaching in India. **(5×1=5 Marks)**

PART – C

Answer **all** questions. **Each** question carries **2** marks :

11. Write all the pre requisites to learn the concept 'circumcircle of a triangle'.
12. List out the models of information processing family.
13. Write a short note on networking in teaching.
14. How will you create an e-mail ?
15. Why branching programming is called intrinsic programming ? **(5×2=10 Marks)**

PART – D

Answer **any four** questions in **one** page :

16. Write the phases of inquiry training model.
17. What is programmed instruction ? Explain the principles of programmed instruction.





- 18. Explain the characteristics of teaching mathematics in developed countries.
- 19. Briefly explain IT @school project.
- 20. Explain the concept of e-twinning.
- 21. What is computer assisted instruction ? List out its advantages and disadvantages. **(4×5=20 Marks)**

PART – E

Answer **any one** question. Question carries **10** marks :

- 22. Explain the concept of TPCK. Prepare a TPCK based content analysis on the topic 'congruency'.
  - 23. Develop a constructivist model lesson plan on any topic from high school mathematics. **(1×10=10 Marks)**
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