J - 4559(Pages : 3) Reg. No.: Name: Second Semester B.Ed. Degree Examination, April 2020 EDU-10.7: TECHNO-PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS -**MATHEMATICS** (2019 Admission) Time: 2 Hours Max. Marks: 50 PART - A Select the most appropriate answer from brackets. Answer all questions. 1. Which among the following is the indigenous platform of MHRD? (a) **SWAYAM** (b) **MOODLE** (c) Edex (d) Linux 2. A model of teaching is a description of learning environment (a) (b) description of curriculum description of learning aids (c) description of teaching concepts 3. The front page of a blog is (a) header (b) index page (c) theme (d) title

P.T.O.

4.	The Concept Attainment Model was developed by			
	(a)	Jean Piaget	(b)	Jerome Bruner
	(c)	Skinner	(d)	Maslow
5.	Inqu	uiry Training Model belongs to ————		– family.
	(a)	Personal family	(b)	Information process family
	(c)	Social family	(d)	Behavioural system family
		PART – B		(5 × 1 = 5 Marks)
Answer all questions in 1 or 2 sentences.				
6.	Write any two features of blog.			
7.	Mention two de-merits of digital learning.			
8.	What is 'e-twinning'?			
9.	What is meant by 'exemplars'?			
10.	Expand MOOC.			
				$(5 \times 1 = 5 \text{ Marks})$
	PART – C			
Answer all questions. Each carries 2 marks.				
11.	List out the components of 'models of teaching'.			
12.	What are the steps to create a blog?			
13	What are the objectives of it @ school project?			

- 14. Differentiate traditional learning from online learning.
- 15. What do you mean by 'Support System' in any models of teaching?

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

PART - D

Answer any four questions in 1 page.

- 16. Explain the phases involved in 'Concept Attainment Model'.
- 17. Explain how 'networking in learning Mathematics' enhances the institutional/professional growth of teachers.
- 18. Explain the challenges and scope of TPCK.
- 19. Discuss in detail any one recent project in Mathematics teaching in India.
- 20. Explain the various families of Models of Teaching.
- 21. What is meant by constructivist model of teaching? Write down its benefits and limitations.

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

PART – E

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

- 22. Develop an 'Inquiry Training Model' Lesson Plan on any topic from high school Mathematics.
- 23. What is TPCK? Explain how content knowledge, pedagogic knowledge and technological knowledge are interrelated. Also write down the benefits of TPCK.

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

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