J - 4547(Pages : 3) Reg. No.: Name: Second Semester B.Ed. Degree Examination, April 2020 **EDU-09.7: CURRICULUM AND RESOURCES IN DIGITAL ERA: MATHEMATICS EDUCATION** (2019 Admission) Time: 2 Hours Max. Marks: 50 Instructions: Answer all questions from Part A, Part B and Part C, four questions from Part D and one question from Part E. PART - A Select the most appropriate answer from the multiple choices given for (Qns 1-5) SMP stand for 1. Scottish Mathematics Program (b) **Scottish Mathematics Project** (c) School Mathematics Program (d) **School Mathematics Project** 2. Paulo Friere is associated with Constructivist learning **Problem Based Learning** (a) (b) (d) (c) Critical Pedagogy Reflective Learning 3. Experiential learning was introduced by John Dewey Lev Vygotsky (a) (b)

Jerome S. Bruner

(c)

David A Kolb

(d)

4.	Tagging in	Web 2.0	application	is called
----	------------	---------	-------------	-----------

(a) directory

(b) taxonomy

(c) folksonomy

(d) syndication

5. Darcy Dinnucci is associated with

(a) Teacher Tube

(b) M-Learning

(c) Web 2.0

(d) Edublog

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

PART - B

Answer all questions in 1 or 2 sentences each:

- 6. Write any two examples for the concept 'Ratio and Proportion' from real life situations.
- 7. Suggest any one topic suitable for research in Mathematics.
- 8. Define curriculum.
- 9. Expand SMSG.
- 10. Give any two situations where Mathematics can be learnt informally.

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

PART - C

Answer all questions in a paragraph each (11-15)

- 11. What are hot potatoes?
- 12. What do you mean by Reflective Learning?
- 13. What do you mean by Learning Management System?

2 **J – 4547**

- 14. Distinguish between topical and spiral approach to curriculum construction.
- 15. What are the advantages of a Mathematics Laboratory?

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

PART - D

Answer **any four** questions in **1** page each.

- 16. Briefly explain the steps involved in Action Research.
- 17. Briefly explain the various curriculum study groups.
- 18. Briefly explain the different informal contexts of learning Mathematics.
- 19. Discuss the importance of natural resources for teaching Mathematics in the present scenario.
- 20. Describe the scope of research in Mathematics.
- 21. Explain the various digital resources in the teaching of Mathematics.

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

PART - E

Answer any one question in 3 pages.

- 22. Explain the role of various agencies of curriculum development in the present scenario.
- 23. Critically evaluate the present school Mathematics curriculum at high school level with regard to the principles of curriculum organisation.

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

3 J - 4547