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Reg. No. : .....

Name : .....

# First Semester B.Ed. Degree Examination, November 2019

## EDU 05.7 : PEDAGOGIC CONTENT KNOWLEDGE ANALYSIS-MATHEMATICS

## (2019 Admission)

Time : 2 Hours

Max. Marks : 50

### $\mathsf{PART} - \mathsf{A}$

Select the most appropriate answer from the bracket (1-5)

- 1. Which is the longest chord of a Circle?
  - (a) Radius (b) Diameter
  - (c) Arc (d) Sewctor
- 2. The highest Category of Cognitive process in Revised Bloorris Taxonomy is
  - (a) Creating (b) Applying
  - (c) Remembering (d) Evaluating
- 3. Which among the following is not a parallelogram?
  - (a) Square (b) Rectangle
  - (c) Rhombus (d) Trapezium

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- 4. Which among the following is not a HOT skill?
  - (a) Critical Thinking (b) Problem Solving
  - (c) Evaluation (d) Remembering
- 5. Which of the following graph uses 'Cumulative Frequency'?
  - (a) Histogram (b) Pie-Chart
  - (c) Ogives (d) Frequency Polygon

(5 × 1 = 5 Marks)

### PART – B

Answer **all** questions in one word or sentence (Question 6-10)

- 6. Mention any two specification, for 'Application'.
- 7. Write down any two advantages of using an Interactive White Board.
- 8. Write any two components of a lesson plan.
- 9. Name any two Constructivist thinkers.
- 10. What is an improvised aid?

### (5 × 1 = 5 Marks)

### PART - C

Answer all questions in two or three sentences each (Question 11-15)

- 11. Write any four uses of graphs.
- 12. Which are the major components of 'Skill of Stimulus-Variation'?
- 13. What are the steps in Content analysis?
- 14. Write down any four advantages of using 'Video Clippings' in the teaching of Mathematics.
- 15. What are digital skills?

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

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### PART – D

#### Answer any four questions.

- 16. List all the curricular objectives of the topic 'Circles' in Standard X.
- 17. What is PCK? Explain the steps involved in it.
- 18. Explain the learning experience that you will provide for introducing the topic 'Probability'.
- 19. Explain the different types of learning aids used in a mathematics Classroom.
- 20. Write any one enrichment activity for teaching the topic 'Co-ordinates'.
- 21. Describe five mathematical skills needed for effective teaching.

(4 × 5 = 20 Marks)

### PART – E

Answer **any one** from the following.

- 22. Prepare a lesson plan in Constructivist format for teaching a topic of your choice.
- 23. What do you mean by 'Planning of instrumentation? Explain the various stages of planning of instruction. Also mention the advantage and disadvantages of each stage of planning of instruction.

(1 × 10 = 10 Marks)