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B.Ed. (CREDIT AND SEMESTER) DEGREE EXAMINATION, JULY 2018

Second Semester

EDU 204.16—PEDAGOGICAL DIMENSIONS OF MATHEMATICS

(2015 Admission onwards)

[Regular/Supplementary]

Time : Two Hours Maximum : 50 Marks

Part A

Answer **all** *questions.*
Each question carries 1 mark.

1. Give any *two* pre-requisites for learning 'Area of a regular hexagon'.

2. Write any *two* specifications of the objective 'Application'.

3. State any *two* situations illustrating the practical application of 'Solids'.

4. Point out any *two* demerits of objective type test items.

5. What is unit plan ?

6. Write the basic concepts required to understand the definition of an 'angle'.

7. What are the uses of a year plan ?

8. Write the functions of a good lesson plan.

9. What is formal operational stage as per Piaget's thinking ?

10. Suggest a situation where technology can be linked to pedagogic content knowledge.

(10 × 1 = 10 marks)

Part B

Answer any **five** *questions.*
Each question carries 2 marks.

11. Describe briefly continuous and comprehensive evaluation.

12. How will you evaluate a project in Mathematics ?

14. Write the importance of pre-requisites in the teaching of mathematics.

15. What do you mean by competency based teaching ?

16. Describe briefly the present evaluation system in our secondary schools.

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

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

17. What are the criteria for evaluating teaching competence ?

18. What learning experience will you provide to enable pupils understand the concept of 'congruence' ?

19. Summarize the steps in Herbatian approach to lesson planning.

20. How will you help pupils to develop speed and accuracy in mathematical calculations ?

21. Write a short note on objective based instruction in Mathematics.

22. List all the curricular objectives in the unit 'Statistics' in Standard IX.

23. Explain the importance of evaluating affective outcomes of mathematics learning.

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

Part D

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

24. Prepare a lesson plan to teach the 'volume of a cone'.

25. What do you understand by taxonomy of educational objectives. Describe with illustration, Bloom's taxonomy of educational objectives in the cognitive domain.

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