

M.Ed. DEGREE (C.B.C.S.S.) EXAMINATION, MAY 2014

Second Semester

Core Course

907.6 – APPLICATIONAL PEDAGOGY OF MATHEMATICS EDUCATION

(Regular/Supplementary)

Time : Three Hours

Maximum Weight : 32

Part A

Answer any two questions.

Each question carries a weight of 4.

1. Select a topic of your choice from Secondary School Mathematics syllabus and develop a lesson transcript based on Inquiry Training Model.
2. Explain the steps on the construction and standardisation of an Achievement test.
3. Explain the theory of Bruner. Detail the contributions made by the theory to Mathematics education.
4. What are basic mathematical skills? How will you assist your students to acquire those skills.

(2 × 4 = 8)

Part B

Answer any six questions.

Each question carries a weight of 2.

5. Write the role of JCT in mathematical education.
6. How will you conduct co-operative learning in your class?
7. Give practical suggestions in motivating students to learn Mathematics.
8. How Gardner's theory helps in mathematics education?
9. Inductive and deductive approaches applied together give better results in mathematics education. Explain.
10. Explain the merits and demerits of Objective types questions.
11. What are the advantages of an activity oriented approach?
12. How will you practice cognitive Growth Model in classroom?

(6 × 2 = 12)

Turn over

Part C

Answer any six questions.

Each question carries a weight of 1.

13. How mathematics learning takes place in project method?
14. Write the importance of remedial instruction in mathematics.
15. What is the role of action research in mathematics class?
16. What is performance based evaluation?
17. What is problem based learning?
18. Explain reversibility in Piaget's theory.
19. Briefly explain the contribution of Ausubel for mathematics education.
20. How will you practice reflective learning strategy?

(6 × 1 = 6)

Part D

Answer all questions.

Each question carries a weight of ½.

21. Bring out the importance of experimental learning.
22. Write out research study that can be carried out in learning styles in mathematics.
23. Write *one* essay type question from Higher Secondary Mathematics syllabus.
24. What is indirect grading system?
25. What is self appraisal?
26. Write two methods to identify mathematical giftedness.
27. What is the manual of a tool?
28. What is brain based learning?
29. What are positive and negative exemplars?
30. Cite *one* example for transfer of learning in Mathematics.
31. What are the components of mathematical creativity?
32. Write two subskills of geometrical skill.

(12 × ½ = 6)