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B – 2308

Reg. No. :

Name :

First Semester B.Ed. Degree Examination, December 2016
EDU 04.7 : THEORETICAL BASE OF MATHEMATICS EDUCATION
(2015 Admn. Onwards)

Time : 2 Hours

Max. Marks : 50

PART – A

Answer all questions.

1. The learner undertakes the responsibility of carrying out one's work. This is closely related with
 - a) Dalton plan
 - b) Supervised study
 - c) Assignment
 - d) Homogeneous grouping
 2. "The progress and improvement of Mathematics are linked to the prosperity of the state". This corresponds to which value of Mathematics.
 - a) Disciplinary
 - b) Practical
 - c) Cultural
 - d) None of these
 3. The Dalton Plan was advocated by
 - a) Gauss
 - b) Bloom
 - c) Helen Parkhurst
 - d) Gagne
 4. Which is the method that starts from conclusion and ends with hypothesis ?
 - a) Analytic
 - b) Lecture
 - c) Project
 - d) Synthetic
 5. The accurate value of π (Pie) was calculated by
 - a) Bhaskara
 - b) Ramanujan
 - c) Aryabhatta
 - d) Euclid
- (5×1=5 Marks)**

P.T.O.



PART – B

Answer **all** questions in **one** word/sentence.

6. The famous book 'Bija Ganitha' was written by _____
7. The term 'Heuristic' means _____
8. Ramanujan number is _____
9. Any specification of the domain 'Knowing' is _____
10. The method that depicts that everything in words is _____

(5×1=5 Marks)

PART – C

Answer **all** questions.

11. Write down any four merits of 'homogeneous grouping'.
12. What are axioms ?
13. What are the essential qualities of a good Mathematics teacher ?
14. Write down the domains included in the 'Revised Bloom's Taxonomy'. List out the higher-order thinking enlisted in revised Bloom's taxonomy.
15. What do you mean by Scaffolding ?

(5×2=10 Marks)

PART – D

Answer **any 4** questions.

16. Name any two Indian Mathematicians and briefly explain their contributions to the world of Mathematics.
17. What is meant by 'Virtual Learning Environment' ? How can you create such environments (V.L.E.) to make better learners ?
18. Explain the steps involved in "Problem Solving" by taking an example from your subject.
19. Write down any two objectives of Mathematics teaching as enlisted in K.C.F. (2007). Suggest ways of attaining those objectives.



20. Briefly explain the phases of teaching.
21. Write a short note on the Revised Bloom's Taxonomy. (4×5=20 Marks)

PART – E

Answer **any one** question .

22. Discuss in detail the relationship of Mathematics with other subjects of the high school curriculum. Give illustrations for it.
23. Enlist and briefly explain various techniques for individualising Mathematics instruction. How do they complement one another in the process of teaching and learning Mathematics. (1×10= 10 Marks)
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