

[31]

Sardar Patel University
B. Ed. (Advanced) Programme (CBCS)
First Year 2017 - 18
Semester – II External Examination
UE02EB2A08

Curriculum and Pedagogy CPS – 3 : Methodology of Teaching Mathematics

Date: 3 / 04 / 2018

Total Marks: 70

Day: Tuesday

Time : 10:00 am to 1:00 pm

Instructions:

- All the Six questions are compulsory.
- The figures in the brackets to the extreme right indicate marks.

Q.1 (A) Answer the following questions in brief. (Any 5) [15]

1. Explain place of Math in school curriculum in context to multifarious values.
2. Write the merits and limitations of Project Method.
3. State the principles of teaching aids in Mathematics teaching.
4. Differentiate between summative evaluation and formative evaluation.
5. What is evaluation rubric? Prepare a rubric to evaluate students' performance in Math project work.
6. Show interdisciplinary relationships of Mathematics with other subjects.

Q. – 2 Answer the following question. [10]

The **Analytical Method** is a generic process combining the power of the **Scientific Method** with the use of formal process to solve any type of problem. Discuss this statement in context to

1. Concept with illustration
2. Merits and Demerits

OR

Q - 2 Write Short notes on

1. Charts as a Teaching Aid – Types and Advantages
2. Steps for Action Research

Q.3 Answer in approximately 160 words each. (Any 2) [10]

1. Differentiate between inductive and deductive approach in teaching of Mathematics.
2. 'Unit planning begins with identifying the particular content to be taught and your goals for learning outcomes'. Explain this statement with illustration.
3. Elaborate various resources in Mathematics teaching.

①

(P.T.O.)

Q.4 [A] Answer the following questions in brief. (Any 5) [15]

1. State the nature of teaching Mathematics in schools.
2. Write the advantages of Synthesis method in teaching Mathematics.
3. Write a brief note on Math virtual classroom
5. Explain the concept and significance of Lesson planning.
4. What is objective type of questions? Explain any one type in detail.
6. What points will you keep in mind while reviewing Worksheet in teaching mathematics?

Q. 5 Answer the following questions in brief. [10]

1. Name the educationist who gave steps for the lesson plan.
2. Write a major difference between analysis and synthesis method in teaching Mathematics.
3. Write two examples of correlation between Mathematics and Science.
4. State two main branches of mathematics.
5. Write any two scope of geometry branch in mathematics.
6. State three major types of questions in preparing a question paper.
7. What 5Es stands of Constructivist approach in teaching Mathematics?
8. Which are the two main types of task analysis?
9. Write a major aim of using evaluation rubrics in teaching Mathematics?
10. Name the research used in solving classroom problems.

Q. 6 Answer in approximately 160 words each. (Any 2) [10]

1. Prepare a brief write up on concept of Evaluation and significance of evaluation rubrics in teaching of Mathematics.
2. Select any one concept from Mathematics Std IX textbook and Prepare two innovative activities to teach the same.
3. Write an article on the topic 'Approaches for organization of Math curriculum' for the magazine Ganeet Shikshan.