Sardar Patel University

B. Ed. (Advanced) Programme (CBCS)

Second Year 2017 - 18

Semester – IV External Examination

UE04EB2A08 : CPS – 6 - Innovative Trends in Teaching Mathematics

Date: 3 / 04 / 2018   Total Marks: 70

Day: Tuesday   Timing: 2:00 pm to 5:00 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. How review of Past studies helps Mathematics teacher to improve classroom teaching?
2. What is Online test? How it is used in Mathematics evaluation?
3. State the significance of E- resources in Mathematics teaching.
4. Explain the maxim Particular to General with suitable illustration.
5. Write the distinguishing features of VIII STD CBSC Mathematics Textbook.
6. Give the significance of OBEX in Mathematics teaching.

Q. – 2 Answer the following question in detail.   **[10]**

'**Inductive approach** is concerned with the generation of new theory emerging from the data.'
Select any one concept from IX STD mathematics textbook and prepare two activities using this approach.

OR

Q - 2 Write Short notes on

1. Personal Qualities of an effective Math Teacher
2. Challenges of a Math Teacher in 21st century

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

1. Explain the significance of Math extension activities in teaching Mathematics.
2. Suggest the points to keep in mind while reviewing M – apps in Mathematics teaching.
3. Enlist atleast five activities to organize under Math club. Elaborate any one in detail.

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

1. State a significance to establish Math club at the school.
2. Which are the two types of organizers in Advanced Organizer Model? Explain any one in detail.
3. What points will you consider to create an e-resources in teaching Mathematics?
4. Prepare three test items for the OBEX in Mathematics.
4. Give any three suggestions based on research to make teaching of Mathematics effective.
5. Explain the concept of Diagnosis in Mathematics Teaching and state its needs.
6. What is Math club? Why it is essential to have a Math club at School?

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

1. Give two examples of e- resources that are used in Mathematics teaching.
2. Write a definition of Lesson Planning.
3. State a major challenge of a learner while learning Mathematics in the classroom.
4. Give any two innovative extension activities in teaching Mathematics.
5. Write any two maxims of Teaching use in Mathematics teaching.
6. What is the role of a Secretary in organization of a Math club?
7. Which programme is to be implemented after the diagnosis of weaknesses among children learning Mathematics?
8. Name two higher order thinking skills that are develop through Mathematics learning.
9. What is the full form of OBEX?
10. State a major feature of Mathematics textbook of STD IX CBSE.

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

1. Write an article on 'Advanced Organizer Model' to teach Mathematics for the magazine Ganeet Shikshan
2. Prepare two HOTs activities for class IX Mathematics.
3. You are invited to deliver a talk on 'Maxims of Teaching' at UGC HRD centre. Prepare a brief note with suitable example.