

C 84321



Name.....

Reg. No.....

**Ph.D. PRELIMINARY QUALIFYING EXAMINATION, JULY 2020**

**Education**

**Paper II—ENHANCING MATHEMATICS LEARNING**

Time : Three Hours

Maximum : 70 Marks

**Section A**

*Answer any two questions.*

*Each question carries 15 marks.*

1. Explain value inculcation and its objectives. Describe in detail John Dewey's valuation theory.
2. Write a short note on logical reasoning. Explain the types and components of logical reasoning.
3. What are mathematical beliefs ? Explain the nature and structure of belief system.
4. What do you mean by achievement test ? Describe the process of construction and standardization of an achievement test.

(2 × 15 = 30 marks)

**Section B**

*Answer any eight questions.*

*Each question carries 5 marks.*

5. Describe briefly the process of reflective thinking.
6. Write a short note on the factors of mathematical problem solving.
7. Describe the elements of critical thinking.
8. What is an Inventory ? Explain its uses.
9. Write a short note on attitude and its components.
10. Write the principles of value formation.
11. What is critical thinking ? Describe its elements.
12. How will you construct a Likert scale ?
13. What is mathematical anxiety ?
14. How can we enhance creativity among students ?
15. Describe briefly Reflective Enquiry Model.
16. What is motivation ? Explain the types of motivation.

(8 × 5 = 40 marks)