



FINAL EXAMINATION QUESTION PAPER

CODE - QP

Approved for Quality Management System

EDUCATION & TRAINING COURSE: DIPLOMA IN TEACHING MATHEMATICS & SCIENCE

COURSE CODE: LC -0844

SUBJECT: METHODS OF TEACHING MATHEMATICS

Faculty	Department / Section / Division
Humanities and Education	Education

<i>INSTRUCTIONS TO CANDIDATES</i>	Date: 2022/12/18
Total Marks = 100	Duration of the examination = 02 hours
	Candidates could be disqualified if you violate examination rules.
	Candidates are not allowed to communicate with and disturb fellow candidates during the examination.

❖ Answer any four questions (Each question carries 25 marks)

Question 01

- a) Briefly introduce Piaget's stages of cognitive development. (10 marks)
- b) Discuss the relationship between Piaget's idea of stages at development and teaching mathematical concepts. (15 marks)

(25 marks)

Question 02

Describe the following teaching methods/strategies using suitable examples.

- a) Inductive-Deductive methods
- b) Heuristic method
- c) Project method

(25 marks)

Question 03

Polya's four step of problem-solving process has provided a model for teaching and assessing problem solving in mathematics classroom.

- a) Name the stages of polya's problem solving method (10 marks)
- b) Describe using suitable examples the steps of Polya's Problem-solving method for mathematics. (15 marks)

(25 marks)

Question 04

Following are the two answers students provided for the sum $0.1 + 0.01$ out of which one is wrong.

- a) 0.11 ii. 0.02 (2marks)
- b) Explain the possible reason/s for this error. (8 marks)
- c) How would you deal with this misconception? Explain using any teaching method you have studied or suggest any other suitable way/s to help the students. (15 marks)

(25 marks)

Question 05

- a) Name 5 different tests you can use in the teaching learning process. (4 marks)
- b) What is a prognosis test? (6 marks)
- c) How prognosis test is valuable for school students? (15 marks)

(25 marks)

Question 06

- a) Explain the abstract nature of mathematics (10 marks)
- b) How would you describe the nature of mathematics? How is it expressed? (15 marks)

(25 marks)

-----END OF THE QUESTION PAPER-----