



NATIONAL OPEN UNIVERSITY OF NIGERIA

Plot 91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi, Abuja

Department of Science Education, Faculty of Education

**POP EXAMINATION
2024_2 EXAMINATION**

Programme: MEd
Course Code: EDU 808
Course Title: Mathematics Curriculum and Instructions in Secondary Schools
Credit Unit: 2 Units
Time Allowed: 2 Hours
Instruction: Answer Three (3) Questions: Question One (1) is Compulsory and any other Two (2).

- 1a. Define the following **terms**: (i) Mathematics (ii) Dynamic Assessment (4 marks)
- 1b. Identify and explain four (4) determinants in curriculum planning process. (10 marks)
- 1c. List two (2) elements of a Unit Plan (2 marks)
- 1d. Differentiate between General Backwardness and Particular Backwardness (4 marks)
- 1e. Discuss five (5) reasons to justify the need for mathematics teachers to draw up a scheme of work. (10 marks)
- 2a. State and explain five (4) types of mental operation as propounded by Guilford. (8 marks)
- 2b. Briefly **explain any three of the following** mathematical problems and offer solutions to them
 - Pedagogical Problems (**4 marks**)

- Teaching Aids **(4 marks)**
- Classroom Organization **(4 marks)**
- Teacher's Competence **(4 marks)** (Any three, Total = 12 marks)

3a. Evaluate the implications of Piaget's theory for mathematics instruction with special reference to Stage Independent Theory and Stage Dependent Theory (E) **(8 marks)**

3b. Write short notes on the following terms:

- Cognitive Domain
 - Affective Domain
 - Psychomotor Domain (12 marks)
- 4a. Discuss four (4) problems and solutions of teaching and learning of mathematics in Nigeria. (16 marks)
 - 4b. State two (2) advantages and two (2) disadvantages of guided discovery lesson. (4 marks)