



NATIONAL OPEN UNIVERSITY OF NIGERIA
91, Cadastral Zone, University Village Nnamdi Azikiwe Express way, Abuja
Faculty of Education, Department of Science Education
2025_2 EXAMINATIONS

COURSE CODE:	EDU808
COURSE TITLE:	MATHEMATICS CURRICULUM & INSTRUCTION IN SECONDARY SCHOOLS
TIME ALLOWED:	2 HOURS 2 CREDIT UNITS
INSTRUCTION:	ATTEMPT QUESTION 1 AND ANY OTHER TWO

1. a) Explain and show how Piaget demonstrated the pre-operational stage in his theory of intellectual development with regards to Mathematics instruction? **(21marks)**
b) How useful to the teacher is the knowledge of this stage in Mathematics instruction? **(9marks)**

- 2a) Explain fully and clearly educational concept of cognitive domain. **(13marks)**
2b) State two behavioural objectives for SS1 Mathematics lesson and analyse at least four components of each. **(7marks)**

- 3a) What conditions must a concept satisfy before it can be included in the content of a Mathematics curriculum? **(11marks)**
3b) Briefly explain the following Mathematics concepts and discuss their relevance as part of the content of Mathematics curriculum;
i) Geometry ii) Arithmetic iii) algebra **(9marks)**

- 4a) Make a vivid explanation of Inductive method of mathematics teaching. **(10marks)**
4b) What are its advantages and disadvantages? **(10marks)**