

**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**91 Cadastral zone, Nnamdi Azikiwe Expressway, Jabi, Abuja**  
**FACULTY OF EDUCATION**  
**DEPARTMENT OF SCIENCE EDUCATION**  
**2023\_1 POP EXAMINATION.**

**COURSE CODE: SED832**  
**COURSE TITLE: CURRICULUM DEVELOPMENT IN SCIENCE EDUCATION**  
**CREDIT UNIT: 3**  
**TIME ALLOWED: 2 HOURS**  
**INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE**

1. Given that one of the aims of primary education in Nigeria is to: “Give the child opportunities for developing manipulative skills that will enable him to function effectively in the society within the limits of his capacity”, identify and discuss seven strategies and the procedure you would adopt to achieve this goal at the instructional delivery of a named science topic.
  
- 2 . In preparation for teaching A NAMED TOPIC to SS1 Students in 35 minutes:
  - i. State two Instructional Objectives .(2mks)
  - ii. State two instructional materials (2mks)
  - iii. Sketch the set-up for demonstrating the lesson 2mks)
  - iv. Develop your Lesson Plan for teaching the topic specifying Content development, Teacher’ Activities, Students’ Activities and Strategies adopted (8 mks)
  - v. Outline two evaluation questions (1mks).
  
3. Generally, there appear to be a consistent disparity in the enrolment pattern, interest and achievement of boys and girls in Science, Technology and Mathematics (STM) in favour of boys.
  - A. Based on your experience as a science teacher, adduce five reasons for this observation.
  - B. Suggest corresponding avenues of improving the situations mentioned in 3a, above.
  
- 4a. Discuss Jerome Bruner’s Model of learning by discovery pointing out four major benefits derived by children when they learn how to investigate and discover for themselves. (8mks)
  - b. What are the Implication of Bruner’s Theory to teaching and learning science (7mks)
  
- 5a. With two specific examples each, differentiate between summative and formative evaluation (8mks).
  - b. Explain why it is necessary to evaluate a science curriculum programme (seven reasons, for 7 mks):