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:	**SED811**
COURSE TITLE:	**FOUNDATIONS OF SCIENCE EDUCATION**
CREDIT UNIT:	**2**
TIME ALLOWED:	**2 HOURS**
INSTRUCTION:	**ANSWER QUESTION ONE AND ANY OTHER TWO**

1a. Distinguish between scientific processes and scientific products giving two examples of each. (6mks)

a. In the absence of a standard metre rule in a school, an innovative science teacher is expected to improvise one. Following appropriate sequence, outline and explain the Four skills involved in the process of improvising a Metre Rule from a strip of Plywood Board. (20mks)

b. Point out Four precautions that must guide the exercise the exercise(4 mks)

(Total 30mks)

2a. Logic is one of the branches of Philosophy of science.

i. Explain the concept of logic. 2mks
ii. Use the statement a theory/law from your subject of specialization to explain the relevance of logic in science. 4mks

b. List and explain five characteristics shown by a creative person/student.(14 mks)
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3a. In general, there is gender inequality in science, technology and mathematics (STM) education in most states of Nigeria with females being disadvantaged. List and discuss five possible reasons that are responsible for this situation. (15mks.)

b.Propose a recommendation for improving each of those five situations discussed in s/n 3a above. (5mks)

4a. Explain the concept of constructivism, pointing out the two basic traditions of constructivism. (5mks)

a. List and explain any five basic tenets of constructivist's theory of learning. (15mks)