



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**14/16 AHMADU BELLO WAY, LAGOS**

***SCHOOL OF EDUCATION***  
**MAY/JUNE 2013 EXAMINATION**

**COURSE CODE: SED 811**  
**COURSE TITLE: FOUNDATIONS OF SCIENCE EDUCATION**  
**TIME ALLOWED: 2 ½ HOURS**

INSTRUCTION : ANSWER QUESTION **ONE** AND ANY OTHER **THREE** QUESTIONS

1.    (a)    Discuss the attributes of science by which it can be defined.  
      (b)    State the major differences between science and science education.  
      (c)    What is Penick's (1993) view about scientific literacy?  
      (d)    Briefly explain Thomas Kohn's concept of scientific paradigm.
2.    Trace the evolution of science education in Nigeria with specific reference to the role played by the missionaries, government efforts and community participation.
- 3     With the aid of specific examples, discuss "models" in science.  
      (b)    Give explanatory definitions of the four branches of philosophy.
4.    State and explain any five characteristics of:  
      (a)    Traits of creative persons.  
      (b)    Give two reasons why Ernst Von Glassersfield is called the father of radical constructivism.
- 5     Describe Joseph Louis Prohist's law of definite proportion.  
      (b)    What are the evidences that favoured the possibility of evolution?  
      (c)    Explain the meaning of neo-Darwinism.

