



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SCHOOL OF EDUCATION
MAY/JUNE 2012 EXAMINATION

SED 711 FOUNDATIONS OF SCIENCE EDUCATION
TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER ALL THE 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. (a) With the aid of specific examples, discuss "models" in science.

 (b) Give explanatory definitions of the four branches of philosophy.
3. (a) Describe Joseph Louis Proust's law of definite proportion.

 (b) What are the evidences that favoured the possibility of evolution?

 (c) Explain the meaning of neo-Darwinism.
4. Trace the evolution of science education in Nigeria with specific reference to the role played by the missionaries, government efforts and community participation.

5. State and explain any five characteristics of:
- (a) Traits of creative persons.
 - (b) Give two reasons why Ernst Von Glasersfeld is called the father of radical constructivism.