



NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF EDUCATION
MARCH/APRIL 2014 EXAMINATION

COURSE CODE: EDU756
COURSE TITLE: PHYSICS METHODS

TIME ALLOWED: 2½ HOURS

INSTRUCTIONS: Answer question number one (1) and any other two (2) questions.

Use the answer booklet provided

1a. Describe the role of the colonial government in the historical development of science education in Nigeria before independent.

b. i Describe R. Gagne's theory of learning.
ii State five (5) implications of R. Gagne's theory of learning for science teaching

c. i Describe how you would develop a Physics scheme of work for Senior Secondary School students in Nigeria.
ii What are the factors that would guide you in developing effective scheme of work?

(30 marks)

2a. Briefly discuss the African Primary Science Project (APSP) by stating the financiers, the date of initiation of the project, the curriculum material produced for execution of the project and the emphasis of the project.

b. i Briefly explain the 'Discussion method' of teaching Physics.
ii. State the advantages and disadvantages of this method in the teaching of Physics

(20 marks)

3a. i Explain the term improvisation of instructional material.
ii What are the steps involved in improvisation of instructional materials?
iii Why is improvisation of instructional materials important to the Nigerian teacher?

b. i Distinguish between scientific theory and scientific law.
ii Give two (2) examples for each of the above concepts

(20 marks)

4a. i State Obe (1977) definition of test.
li Identify and explain three (3) major groups in which Findley (1963) categorized the functions of the classroom test.

b. Identify and discuss four (4) roles of the head of Physics unit apart from teaching

Physics.

(20 marks)