



NATIONAL OPEN UNIVERSITY OF NIGERIA

Plot 91 Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja.

FACULTY OF EDUCATION

2020_1 Semester

COURSE CODE: EDU754
COURSE TITLE: INTEGRATED SCIENCE METHOD
CREDIT UNIT: 2
TIME ALLOWED: 2HOURS

INSTRUCTION: Answer Question One and Any Other Two

- 1ai. What is integrated science? **(4 marks)**
- ii. When did STAN get involved in Integrated Science and why? **(2 marks)**
- b. Compare the essay examination with the objective type of examination with reference to
 - i. Learning outcomes to be measured
 - ii. Framing the questions
 - iii. Scoring
 - iv. Influence of extraneous factor**(8 marks)**
- ci. Discuss the concept of human resources with respect to the teaching and learning of science subjects. **(6 marks)**
- ii. Teachers as managers of classroom have double roles to play. Discuss the 5 roles played by classroom teachers as managers. **(4 marks)**
- d. There are series of problems that beset the teaching of Integrated science in Nigerian schools. State any three problems that affect teaching and how to solve the problems **(6 marks)**
- 2ai. What is a marking scheme in relation to essay and objective tests? **(4 marks)**
- ii. In your school, there are three science teachers of physics, chemistry and biology. Suggest reasons why team teaching will be appropriate using the three teachers in integrated science teaching. **(2 marks)**

- b. Scientists have some personal attitudes of exploring or knowing about things in their surroundings. State four (4) reasons why it necessary to develop scientific attitudes in students. **(4 marks)**
- ci. Brunner's theory emphasizes the great importance of three types of human activities for learning (information-processing systems). Discuss Jerome S. Brunner's perception of classroom instruction **(6 marks)**
- ii. Name four (4) fields in the study of science **(4 marks)**
- 3a. What are the measures that made Integrated Science to survive in Junior Secondary School Curriculum in Nigeria? **(5 marks)**
- b. Curriculum planners faced some difficulties in an attempt to include Integrated Science in our Junior Secondary School Curriculum. Explain some problems faced by schools for inclusion of integrated science **(5 marks)**
- ci. You are a student teacher of distance learning system; mention one reason why micro-teaching should be part of your integrated science programme. **(4 marks)**
- ii. List the science process skills and the scientific attitude involved in the following activity:
"If you take a bottle full of water and empty it into a large empty jar. What will you notice? If you pour it from the jar into the bottle again, will it now fill the bottle? If not, write down the reasons for this". **(6 marks)**
- 4ai. What is the relationship between subsumer and advance organizer? **(4 marks)**
- ii. State four importance of teacher's demonstration table **(4 marks)**
- b. Considering the contributions field trip can make to teaching of science. Mention three (3) reasons why teachers should use it as a method of teaching and three (3) reasons why it should not be used as only method of teaching science. **(6 marks)**
- c. In your own opinion enumerate any three frequently methods of teaching adopted by science teachers in Nigeria. **(6 marks)**