



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
Plot 91 Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja.  
**DEPARTMENT OF SCIENCE EDUCATION**

**EXAMINATION: 2021\_1**  
**COURSE CODE: EDU754**  
**COURSE TITLE: INTEGRATED SCIENCE METHODS**  
**CREDIT UNIT: 2**  
**TIME ALLOWED: 2HOURS**  
**INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO**

- 1ai. What is hypothesis? **(4Marks)**
- ii. Explain scientific hypothesis. **(5Marks)**
- b. Differentiate between the following terms in relation to science:
  - i. Concept and law **(3Marks)**
  - ii. Law and theory **(3Marks)**
- ci. As an integrated science teacher in a teachers' college, you were asked to supervise your students on teaching practice. Explain the features of science lesson plan you should expect from the students. **(5Marks)**
- ii. What is the importance of lesson plan? **(5Marks)**
- d. Highlight your traditional roles as a science teacher in integrated science laboratory **(5Marks)**
- 2a. It is a common thing that even when all necessary precautions are taken, the integrated science laboratory is prone to accidents. Outline the first aid treatment you would give to the victim of the following laboratory accidents.
  - i. Bleeding due to cut glasses **(2Marks)**
  - ii. Burns caused by naked fire or chemicals **(2Marks)**
  - iii. Fainting caused by a gas poisoning **(2Marks)**
- b. Discuss the relevance of questioning techniques used by integrated science teachers during the teaching and learning processes. **(5Marks)**
- ci. There are three categories of resource materials necessary for delivery of quality education. Identify and explain the three of them as related to the teaching of integrated science. **(9Marks)**
- 3a. Explain five (5) advantages and five (5) disadvantages of objective test. **(10Marks)**

- b. When you hear child-centred curriculum, what are the major things that come to your mind as a professional teacher? **(4Marks)**
- c. The Basic Science and Technology curriculum was revised in 2012 as a result of the restructuring and integration of four primary and junior secondary science curriculum.
  - i. How many science subjects were integrated into one? List them. **(2Marks)**
  - ii. Why were they restructured? **(4Marks)**
- 4a. Certain topics cannot be taught to a large class. If you have such large class, explain discussion method as a technique to teach a large class **(8Marks)**
- b. As stated in National Policy of Education (2009), government proposed that the integration of ICT into education in Nigeria begins from primary school. Discuss the use of ICT in the teaching of Basic Science and Technology. **(3Marks)**
- c. Briefly justify with examples, four criteria that are essential for integrated science teachers to consider when selecting the most appropriate methods of teaching in schools. **(9Marks)**