



NATIONAL OPEN UNIVERISTY OF NIGERIA

Plot 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja

DEPARTMENT OF SCIENCE EDUCATION

EXAMINATION: 2021_1

COURSE CODE: EDU750

COURSE TITLE: BIOLOGY METHODS

CREDIT UNIT: 2

TIME ALLOWED: 2 HOURS

INSTRUCTION: ANSWER THREE QUESTIONS FROM FOUR, ALL QUESTIONS CARRY EQUAL MARKS.

ONE Mark will be awarded for orderly presentation of answers.

1a. Explain the effects of any four (4) of the listed hazards when performing experiment in the Biology laboratory:

i. Chemical substance that explodes violently when it is exposed to a relatively small amount of energy **5MARKS**

ii. Injury on skin **5MARKS**

iii. Open flames **5MARKS**

iv. Irritation to body tissue. **5MARKS**

v. Equipment using electricity in laboratory **5MARKS**

b. Identify three (3) ways to prevent burns hazards in laboratory **3MARKS**

2a. Explain the salient features that serve as basis for the preparation of your lesson plan using the following headings:

(i) How do you state the objectives of the lesson **5MARKS**

(ii) How to make class interesting to your students in the Classroom **5MARKS**

(iii) Resources in close environment needed for the lesson. **7MARKS**

(iv) How to choose of appropriate teaching strategies that will make teaching/learning clearer in relation to objectives. **6MARKS**

3ai. Lesson plan has been defined by various authors and scientists, Give four (4) important definitions of a lesson plan. **4MARKS**

b. Discuss six (6) essential features you will consider as very important when writing a lesson plan. **12MARKS**

c. In Biology education, what are the seven (7) rationales science teachers should consider for preparing and planning lesson? **7MARKS**

4a. There is no curriculum without the scheme of work. Discuss six (6) guidelines to help the Biology teacher in drawing the scheme of work for Biology class. **12MARKS**

b. The plan of instruction in a programme of study is an essential process. If you are to plan a programme, identify five (5) and discuss three (3) components of the total plan of instruction that should be found in your proposed programme **11MARKS**.