



## QUESTION SET 1

### NATIONAL OPEN UNIVERSITY OF NIGERIA

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

### DEPARTMENT OF SCIENCE EDUCATION

**EXAMINATION: 2021\_1**

**COURSE CODE: SED324**

**COURSE TITLE: SCHOOL SCIENCE LABORATORY**

**CREDIT UNIT: 2**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO**

- 1a. State the guidelines you would use as a science teacher when: **(12Marks)**
  - i. Using corrosive acids as bench reagents
  - ii. Mixing concentrated acid and water
  - iii. Heating flammable liquids
  - iv. Handling life electrical appliances
  - v. Performing experiment involving electrical circuits
  - vi. Using corrosive alkaline as bench reagents
- b. Outline first aid treatment you would give to one of your students that has burns during qualitative analysis practical class. **(8Marks)**
- c. You have been introduced to tips on how to get your research report together from your research methods class. Enumerate ten general formal setup of a research report in science laboratory. **(10Marks)**
  
- 2a. As a science teacher, you have rules and regulations for the laboratory staff, students and attendants in your school, list them. **(10Marks)**
- b. You have just been posted to a secondary in a rural area of your state. Envisage some of the problems your school might have in the use of computers? List at five (5) of them. **(5Marks)**
- c. Several safety issues and activities have been identified through inspections. What are the most common laboratory safety problems you intended to bring to the attention of your HOD as a science teacher? **(5Marks)**
  
- 3a. You have been exposed to the obligations of the science teacher to ensure safety in your school laboratory. Discuss the general preventive measures taken to avoid accident in the science laboratory. **(10Marks)**
- b. Discuss the two methods that could be used to dispose of chemical waste in the school

laboratory. **(10Marks)**

- 4a. As a science teacher, since the outdoor laboratory would have been less expensive with lots of space for student-teacher interaction, then why the emphasis on having a building? **(10Marks)**
- b. The Teacher Demonstration Desk, popularly known as Work Station is an important point in school science laboratory. Describe the work station of a modern power lab 8. **(5Marks)**
- c. Explain how you can use the computer to demonstrate reproductive system to your students in the Biology class. **(5Marks)**