



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Plot 91, Cadastral Zone, National Azikiwe Expressway, Jabi-Abuja**  
**FACULTY OF HEALTH SCIENCES**  
**(Department of Environmental Health Science)**  
**APRIL 2021\_1 EXAMINATIONS**

**Course Code: EHS 403**

**Course Title: Environmental Health Laboratory**

**Course Unit: 3**

**Time Allowed: 1 ½ Hours**

**Total Score: 70 Marks**

**Instruction: Answer ALL the Questions**

Q1 a) What is Science Laboratory? **(5 marks)**

b) What are laboratory techniques **(5 marks)**

c) Why is Environmental Laboratory important in Public Health? **(10 marks)**

Q2a) Distinguish between Laboratory Notebook and Diary. **(5marks)**

b) What are the Laboratory Design Considerations? **(10 marks)**

**Q3a)** Discuss the general goals for setting laboratory under the following

- i. Safety **(5 marks)**
- ii. Comfort **(6 marks)**
- iii. Energy efficiency **(4 marks)**

3b) What is the molarity of a solution made by dissolving 2.355 g of sulfuric acid in water and diluting to a final volume of 50.0 mL? **(5 marks)**

Q4 a) What is instrumentation **(3 marks)**

b) What are the requirements for choosing instrumentation for laboratory analysis **(8 marks)**

c) What is a Cryostat? **(4 marks)**