



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-ABUJA
FACULTY OF HEALTH SCIENCES
(DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE)
2023_1 POP EXAMINATION

COURSE CODE: EHS 403

COURSE TITLE: ENVIRONMENTAL HEALTH LABORATORY

COURSE UNIT: 3

TIME ALLOWED: 2 HOURS

TOTAL SCORE: 70 MARKS

INSTRUCTION: ANSWER ALL THE QUESTIONS

- 1a) List 3 acts that support the establishment of environmental laboratories **(3 marks)**
b. Write on the Functions of Environmental Laboratories **(5 marks)**
c. What are the key things that a complete laboratory record book must contain? **(6 marks)**

- 2a) What are the building requirements for constructing a laboratory? **(4 marks)**
b. List and explain the different ventilation control types? **(18 marks)**
c. How can Environmental Laboratory soundness be achieved? **(10 marks)**

3a) Define the following:

Stock standard solution

Standard solution **(5 marks)**

Molar solution

- b. 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)**
c. Mention the different hazard classes of chemicals. **(3 marks)**

4a. What is a Standard Operating Procedure **(5 marks)**

- b. List and explain the 2 levels of Analytical Quality Control programmes and their importance **(6 marks)**