



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NATIONAL AZIKIWE EXPRESSWAY, JABI-ABUJA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE
2025_2 EXAMINATIONS

COURSE CODE: EHS 403

COURSE TITLE: ENVIRONMENTAL HEALTH LABORATORY

COURSE UNIT: 3 CREDIT UNITS

TIME ALLOWED: 2 HOURS

TOTAL SCORE: 70 MARKS

INSTRUCTION: ANSWER ALL THE QUESTIONS

Question 1

- (a) Define Environmental health laboratory and laboratory equipment **5 marks**
- (b) Write a short note on the following acts as they support the establishment of environmental laboratories
 - (i) The Water (Prevention and Control of Pollution), Act, 1974 **5 marks**
 - (ii) The Air (Prevention and Control of Pollution) Act, 1981 **5 marks**
 - (iii) The Environment (Protection) Act, 1986 **5 marks**

Question 2

- (a) List three (3) functions of environmental laboratories **3 marks**
- (b) Differentiate between a laboratory notebook, a log book, and a diary **3 marks**
- (c) Enumerate nine (9) key things a complete record of an experiment or project should probably contain **9 marks**

Question 3

- (a) Mention ten (10) instructions for recording data in the laboratory notebook **10 marks**
- (b) List five (5) laboratory design considerations to be made in the construction of a laboratory **5 marks**

Question 4

- (a) The general goals in construction of a laboratory include safety, comfort and energy efficiency. Briefly explain them. **12 marks**
- (b) What are the three (3) drivers used to determine the required volume of supply air in a laboratory **3 marks**
- (c) Enumerate five (5) advantages of Variable Air Volume (VAV) in ventilation control of a laboratory **5 marks**