



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE
2024 1 EXAMINATION

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

1. Explain polymerase chain reaction under these headings
 - a. Definition **3 marks**
 - b. Basic steps involve in its operation **9 marks**
 - c. Applications **4 marks**
 - d. Ingredients for successful application **4 marks**

2.
 - a. What is Fume hood? **5 marks**
 - b. Outline the primary and secondary objectives of laboratory design **10 marks**
 - c. What precautionary measures should be taken when mixing concentrated acid with water? **5 marks**

3.
 - a. What do you understand about Laboratory standard operating procedures **10 marks**
 - b. Briefly explain laboratory quality system **5 marks**

4.
 - a. Highlight the different sections that must be present in environmental laboratory **10 marks**

 - b. Mention five (5) essential facilities that must be put in place to safeguard the lives of laboratory users **5 marks**