



**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 308**

**COURSE TITLE: ENVIRONMENTAL BIOTECHNOLOGY**

**COURSE UNIT: 3**

**TIME ALLOWED: 2 HOURS**

**TOTAL SCORE: 70 MARKS**

**INSTRUCTION: ANSWER ALL THE QUESTIONS**

1. (a) Define the following
  - Environmental Biotechnology **2 marks**
  - Genetic engineering **2 marks**
  - Bioremediation **2 marks**
- (b) Differentiate between ancient and modern biotechnology **5 marks**
- (c) List five (5) importance of biotechnology **5 marks**

**TOTAL = 16 marks**

2. Explain the following terms
  - Red Biotechnology **5 marks**
  - Green biotechnology **5 marks**
  - White Biotechnology **5 marks**
  - Fermentation **3 marks**

**TOTAL = 18 marks**

3. (a) List the three (3) methods of genetic engineering **3 marks**
- (b) List ten (10) the standard methods to prevent infection and injuries **10 marks**
- (c) List five (5) crops produced by genetic engineering **5 marks**

**TOTAL = 18 marks**

- 4 (a) Highlight six (6) advantages of biotechnology to health care delivery **12 marks**
- (b) Outline six (6) advantages of botano-remediation **6 marks**

**TOTAL = 18 marks**