



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja

FACULTY OF SCIENCES
DEPARTMENT OF ENVIRONMENTAL SCIENCE
2023_1 POP EXAMINATION.

COURSE CODE: ESM 317

DURATION: 2 HRS

CREDIT UNIT: 2

COURSE TITLE: LAND AND WATER POLLUTION

INSTRUCTION: Attempt question Number one (1) and any other two. Question number 1 is compulsory and carries 30 marks, while the other questions carry equal marks of (20mks) each. Present all your points in coherent and orderly manner

1. (a) Mention and 3 factors that are responsible for high rate of deforestation in Nigeria. **3mks.**
 - (b) Explain in details what is meant by 'Pollution' **9mks**
 - (c) Explain how can a water source be thermally polluted **9mks**
 - (d) In one sentence and example, what is soil pollution. **2mks**
 - (e) Briefly explains the measures to land pollution in Nigeria. **7mks**

2. In simple and clear terms, justify the essence of Recycling in the practice of modern waste management. **20mks.**

3. (a) Justify why it is important to treat wastewater discharged from homes and commercial establishments before disposal **5mks**
 - (b) Briefly discuss the stages of treating the above-mentioned wastes. **10mks**
 - (c) What options are there for controlling industrial wastewater? **5mks**

4. (a) Briefly explain how recycling be done. **8mks**
 - (b) Discus on the manufacture of steel using recycled materials. **12mks.**

5. Give a detail classification on the varied ways pollutants are classified. **20mks**