



**National Open University of Nigeria**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**2023\_2 EXAMINATIONS**

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**COURSE CODE: ESM317**

**COURSE TITLE: Land and Water Pollution**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**Instruction:** Attempt question number ONE (1) and any other THREE (3) questions. Question number one (1) carries 25 marks, while the other questions carry (15) marks each.

- 1a) Define the term hazardous wastes (2 marks)  
1b) State briefly water borne infectious diseases (3 marks)  
1c) When does chemical water pollution occur? (2 marks)  
1d) i Define the term pesticides with examples (3 marks)  
    ii What are the effects of mercury to human beings (3 marks)  
    iii Define acid mine drainage (3 marks)  
1e) i State briefly the concept of water quality (4marks)  
    ii Define land pollution (3 marks)  
1f) Itemise sources of solid wastes that can lead to land pollution (2 marks)
- 2a) State secondary effects of pollution (2 marks)  
2b) What are the problems of soil pollution? (3 marks)  
2c) Describe the incidence of pollution on plants and animals (4 marks)  
2d) Describe how plastics can be recycled (2 marks)  
2e) Explain how pulp is formed (4 marks)
- 3a) Explain the term environmental pollution (2 marks)  
3b) State the effects of water pollution (3 marks)  
3c) What are the implications of noise pollution? (4 marks)  
3d) State briefly classification of pollutants (2 marks)  
3e) Define the term recycling (4 marks)
- 4a) State the types of water pollutants (2 marks)  
4b) Classify water pollution (3 marks)  
4c) Discuss briefly Agriculture water pollution (4 marks)  
4d) What is sediment? (2 marks)  
4e) Explain briefly thermal pollution (4 marks)
- 5a) Define the term soil pollution (2marks)  
5b) What are the causes of land pollution? (3marks)  
5c) How can land pollution be prevented? (4 marks)  
5d) Enumerate sources of hazardous wastes (2 marks)  
5e) Define the term deforestation (4 marks)