



**MACHAKOS UNIVERSITY**

**University Supplementary/Special Examinations for 2021/2022 Academic Year**

**SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT**

**DEPARTMENT OF ENVIRONMENTAL SCIENCES**

**Third Year Second Semester Supplementary/Special Examination for Bachelor's degree in  
Environmental Sciences**

**ENS 343: ENVIRONMENTAL POLLUTION AND ECOTOXICOLOGY**

**Date:**

**Time:**

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**INSTRUCTIONS:** Answer Question **one** and any other **two** questions

**QUESTION ONE (30 marks)**

- a) Explain the following terms
- i. Soil pollution (2 marks)
  - ii. Water quality (2 marks)
  - iii. Persistent Organic pollutants (2 marks)
  - iv. Chemical Oxygen Demand (2 marks)
  - v. Ecotoxicology (2 marks)
- b) Explain the properties of water that make it a unique liquid (10 marks)
- c) Explain any four emerging pollutants and their effects to the environment (10 marks).

**QUESTION TWO (20 Marks)**

Using examples, discuss the main sources of water pollution in Kenya and measures the government has taken to curb water pollution.

**QUESTION THREE (20 Marks)**

Discuss any four physico-chemical parameters of water and how they can be measured in the field

**QUESTION FOUR (20 Marks)**

Discuss the drivers of environmental degradation in Kenya

**QUESTION FIVE (20 Marks)**

Discuss the human health risks associated with environmental pollution