



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL SCIENCES

ENS 343: ENVIRONMENTAL POLLUTION AND ECOTOXICOLOGY

DATE: 11/11/2020

TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (20 MARKS)

- a) Explain the meaning of the following
- i. Environmental pollution (2 marks)
 - ii. Water quality (2 marks)
 - iii. Organic pollutants (2 marks)
 - iv. Biological Oxygen Demand (2 marks)
 - v. Ecotoxicology (2 marks)
- b) Explain the properties of water that make it a unique liquid. (10 marks)
- c) Explain the drivers of environmental degradation in Kenya. (10 marks)

QUESTION TWO (20 MARKS)

Discuss the types of water pollution in Kenya and the measures the government has put in place to control environmental pollution.

QUESTION THREE (20 MARKS)

Citing examples, discuss the ecological effects of pesticides on aquatic ecosystems.

QUESTION FOUR (20 MARKS)

Heavy metal pollution is one of the major challenges in the modern human society. Discuss.

QUESTION FIVE (20 MARKS)

The department of water and irrigation in Machakos County has contracted you to carry out water quality assessment for Maruba dam. Explain how you carry out the exercise.