



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

FIRST YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR IN ENVIRONMENTAL SCIENCES

ENS 136: PRINCIPLES OF ENVIRONMENTAL SCIENCE

DATE: 23/7/2019

TIME: 8.30-10.30 AM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Explain the meaning of the following terms
 - i. Biosphere (2 marks)
 - ii. Environmental Science (2 marks)
 - iii. Food chain (2 marks)
 - iv. Sustainable development (2 marks)
- b) Explain the different segments of the earth's environment (16 marks)
- c) Explain the causes and impacts of acid rain to the environment (6 marks)

QUESTION TWO (20 MARKS)

- a) Discuss three major environmental challenges in Kenya and indicate how the government is addressing them (12 marks)
- b) Explain the importance of environmental science to the society (8 marks)

QUESTION THREE (20 MARKS)

Explain the causes and impacts of global warming in Kenya

QUESTION FOUR (20 MARKS)

Using diagrammatic illustrations, explain the hydrological cycle

QUESTION FIVE (20 MARKS)

- a) Explain the biotic components of an ecosystem of your choice (12 marks)
- b) Explain two factors that influenced the growth of environmental movements (8 marks)