



MACHAKOS UNIVERSITY

University Examinations for 2018/2019

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCE MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL SCIENCES
FIRST YEAR SUPPLEMENTARY EXAMINATION FOR
BACHELOR OF ENVIRONMENTAL STUDIES AND COMMUNITY DEVELOPMENT
BACHELOR OF ENVIRONMENTAL RESOURCE CONSERVATION
ENS 136: PRINCIPLES OF ENVIRONMENTAL SCIENCE

DATE: 24/9/2019

TIME: 8:30 – 10:30AM

INSTRUCTIONS

Answer Question One (Compulsory) And Any Other Two Questions. Use Illustrations Where Necessary.

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain the ecosystem services obtained from a natural forest (5 marks)
- b) Describe the multidisciplinary nature of environmental science (4 marks)
- c) With the help of a diagram, explain the layers of the atmosphere (6 marks)
- d) Highlight six basic principles sustainable development (6 marks)
- e) Explain how irrigation contributes to soil pollution (5 marks)
- f) Give reasons for expansions of increased environmental hazards in Kenya today (4 marks)

QUESTION TWO (20 MARKS)

With a diagram, describe the role of hydrological cycle and explain how man disrupts the balance

QUESTION THREE (20 MARKS)

With a diagram explain the concept of “greenhouse effects” and suggest viable remedies to its resultant negative effects.

QUESTION FOUR (20 MARKS)

Give an account of the events that shaped the evolution of environmental science as a discipline of growing environmental concerns worldwide.

QUESTION FIVE (20 MARKS)

Explain how agriculture impacts and is also impacted on by water pollution