



MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

FIRST YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF
ENVIRONMENTAL SCIENCES

ENS 136: PRINCIPLES OF ENVIRONMENTAL SCIENCE

DATE: 5/12/2017

TIME: 8.30-10.30 AM

INSTRUCTIONS:

Answer Question one and any other two questions

1. a) Explain the meaning of the following terms
 - i. Environment (2 marks)
 - ii. Ecology (2 marks)
 - iii. Ecosystem (2 marks)
 - iv. Sustainable development (2 marks)
- b) Explain the different segments of the earth's environment (16 marks)
- c) Environmental science is a multidisciplinary science. Explain (6 marks)
2. Discuss four major environmental challenges in Kenya and indicate how the government is addressing them (20 marks)
3. Explain the role of environmental science to sustainable development (20 marks)
4. Explain how the world responded to environmental threats between the year 1970 and 2000 (20 marks)
5. Using examples, explain the energy flow concept in ecosystems (20 marks)