



MACHAKOS UNIVERSITY

University Examinations for 2018/2019

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCE MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

**SECOND YEAR SUPPLEMENTARY EXAMINATION FOR
BACHELOR OF ENVIRONMENTAL STUDIES AND COMMUNITY DEVELOPMENT
BACHELOR OF ENVIRONMENTAL STUDIES (RESOURCE CONSERVATION)
ECD 206: PRINCIPLES OF NATURAL RESOURCES MANAGEMENT**

DATE: 25/9/2019

TIME: 8:30 – 10:30 AM

INSTRUCTIONS: Answer question ONE and any other TWO

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain the following terms
- i) Biodiversity (2 marks)
 - ii) Sustainable development (2 marks)
 - iii) Adaptive natural resource management (2 marks)
 - iv) Tragedy of the commons (2 marks)
 - v) Polluter Pays Principle (2 marks)
- b) Discuss the key characteristics of the adaptive management approach as used in natural resources management (10 marks)
- c) Using appropriate examples, discuss the key ecological principles relevant to the sustainable management of forestry resources in Kenya (10 marks)

QUESTION TWO (20 MARKS)

- a) Describe the suitable framework for effective application of the precautionary principle in management of natural resources in your county (10 marks)
- b) Using appropriate examples, discuss the importance of stakeholder participation in Natural Resources Management. (10 marks)

QUESTION THREE (20 MARKS)

Citing relevant examples, discuss the linkages between sustainable natural resources management and human well-being.

QUESTION FOUR (20 MARKS)

Citing relevant examples explain the distinctive characteristics of the community-based natural resource management approach.

QUESTION FIVE (20 MARKS)

- a) Discuss the general changes in natural resource management paradigms using appropriate examples (10 marks)
- b) Explain the key principles of the ecosystem approach to natural resource management (10 marks)