



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES

**THIRD YEAR SECOND SEMESTER EXAMINATION FOR
BACHELOR OF ENVIRONMENTAL STUDIES
(ENVIRONMENTAL RESOURCES CONSERVATION)**

ERC 316: MULTIPLE-USE FOREST MANAGEMENT

Date: 2/12/2016

Time: 2 Hours

INSTRUCTIONS:

Answer Question **ONE** and **ANY OTHER TWO** questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain the meaning of the following terms
- i) Multiple-use forest management (2 marks)
 - ii) Biodiversity conservation (2 marks)
 - iii) Forest fire management (2 marks)
 - iv) Carbon sequestration (2 marks)
- b) Explain three types of forest fires that occur in Kenya. (6 marks)
- c) Explain four causes of over exploitation of natural forest resources in Kenya. (12 marks)
- d) Explain two reasons why the concept of multiple-use forest management is important in Kenya (4 marks)

QUESTION TWO (20 MARKS)

Discuss the effects of deforestation and forest degradation in Kenya (20 marks)

QUESTION THREE (20 MARKS)

- a) Discuss three major constraints that could lead to poor implementation of Multiple-use Forest Management in Kenya. (12 marks)
- b) By use of specific examples, explain four causes of natural resources conflicts in Kenya and suggest possible mitigation strategies. (8 marks)

QUESTION FOUR (20 MARKS)

Citing examples, discuss four multiple values of forests in Kenya (20 marks)

QUESTION FIVE (20 MARKS)

- a) Explain five causes of forest fires in Kenya and the mitigation measures that can be employed to curb the forest fires . (10 marks)
- b) Discuss the effects of forest fires on the natural environment in Kenya (10 marks)