



MACHAKOS UNIVERSITY

University Examinations For 2018/2019 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELORS OF ENVIRONMENTAL STUDIES

(RESOURCE CONSERVATION)

ERC 316: MULTIPLE USE FOREST MANAGEMENT

DATE: 16/4/2019

TIME: 2:00 – 4:00 PM

INSTRUCTIONS: Answer question ONE and TWO other questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Differentiate between the following terms as used in Forest Management
 - i) Forest Management and Multiple use forest management (4 marks)
 - ii) Afforestation and Reforestation (4 marks)
 - iii) Global warming and climate change (4 marks)
- b) Describe the three major techniques for forest Management (6 marks)
- c) Outline the chain of custody for export of charcoal through the port of Mombasa. (12 marks)

QUESTION TWO (20 MARKS)

Discuss carbon sequestration and describe how you would manage a forest block for carbon sequestration in your station

QUESTION THREE (20 MARKS)

Assume you have been appointed as a watershed Manager in Tana Athi Rivers Development authority (TARDA). Describe how you will ensure that Aberdares and Mt Kenya Forests are managed for water conservation in your new appointment

QUESTION FOUR (20 MARKS)

- a) Assume you are in charge of a Forest Station in Mt. Kenya forest and there is a fire outbreak, detail how you would go about containing the fire and give the challenges you might encounter (10 marks)
- b) Speculate on the causes and effects of fire (10 marks)

QUESTION FIVE (20 MARKS)

Discuss the relevant laws and policies that govern trade in Forestry products in Kenya.