



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF ENVIRONMENTAL STUDIES (RESOURCE MANAGEMENT)

ERC 213: INTRODUCTION TO WILDLIFE AND RANGELAND RESOURCES

DATE: 27/11/2020

TIME: 8:30 – 10:30 AM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Describe the concept of habitat as it applies to wildlife and rangeland environment. (5 marks)
- b) Explain the factors that increase grazing resistance to range plants. (5 marks)
- c) Describe the indicators of rangeland resource degradation. (5 marks)
- d) Explain the relevance of reseeding and range rehabilitation. (5 marks)
- e) Describe how grazing animals influence their habitat in the rangelands. (5 marks)
- f) Explain the effects of animal control in the rangelands. (5 marks)

QUESTION TWO (20 MARKS)

- a) Describe the mechanisms that enable plants to adapt to the range environment. (10 marks)
- b) Discuss the economic value of rangeland biodiversity. (10 marks)

QUESTION THREE (20 MARKS)

Discuss the factors causing degradation of rangelands in Kenya.

QUESTION FOUR (20 MARKS)

Citing specific examples, discuss the approaches of managing human-wildlife conflicts in Kenya.

QUESTION FIVE (20 MARKS)

Discuss the rangeland environment characteristics that influence the nature of rangeland vegetation.