



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL SCIENCES

**SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR
BACHELOR OF ENVIRONMENTAL STUDIES (ENVIRONMENTAL RESOURCE
CONSERVATION)**

ENS 241: BIODIVERSITY CONSERVATION

DATE: 25/3/2021

TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Briefly describe the levels at which biodiversity is studied and measured. (10 marks)
- b) Explain the relationship between size, abundance and diversity of species. (10 marks)
- c) Explain how biodiversity conservation is enhanced in Kenya. (10 marks)

QUESTION TWO (20 MARKS)

Discuss the benefits and controversies behind adoption of genetically modified organisms in developing countries.

QUESTION THREE (20 MARKS)

- a) Explain why alien plant species have become increasingly invasive in Africa. (10 marks)
- b) Discuss the characteristics that make the habitats more vulnerable to invasion. (10 marks)

QUESTION FOUR (20 MARKS)

Discuss the importance and values of biodiversity that warrant its conservation.

QUESTION FIVE (20 MARKS)

Discuss the major obstacles to greater progress in conserving biodiversity in Kenya.