



MACHAKOS UNIVERSITY

University Examinations 2022/2023 academic Year

SCHOOL OF PURE AND APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (BIOLOGY)

SZL 415: ECOLOGY & SUSTAINABLE DEVELOPMENT

DATE:

TIME:

INSTRUCTIONS

Answer Question One And Any Other Two Questions

SECTION A (COMPULSORY)

1.

- a. Outline the significance of the the earth's summits (3 marks)
- b. Outline three primary goals of sustainability (3 marks)
- c. Outline three principles of ecological sustainability (3 months)
- d. Outline the significance of the Ramsar Convention (3 marks)
- a. Outline three objectives of the Convention on Biological Diversity (3 Marks)
- b. Outline four Key elements in an Environmental Management Plan (4 marks)
- c. Describe three ways by which the public can be involved in decisions about planned development activities (3 marks)
- e. Outline three ways by which Kenya has demonstrated commitment to international sustainable development principles (3 marks)
- f. Explain why the governments decision to evict her citizens from the Mau forest should be supported (3 marks)

- g. Describe the following terms: (2 marks)
- i. Agroecology
 - ii. Ecosystem Resilience –

SECTION B: ANSWER ANY OTHER TWO QUESTIONS

- 2.
- a. Explain when development activities would be considered non-sustainable (10 marks)
 - b. Explain how consumer behaviour may contribute to ecological un-sustainability (10 marks)
3. Intensification of agriculture is unnecessary and unsustainable. Discuss (20 marks)
4. Discuss Biodiversity Conservation (20 marks)
5. The ever increasing human population is a threat to its own sustainability. Discuss (20 marks)