



"Investing in Africa's Future"

FACULTY OF AGRICULTURE AND NATURAL RESOURCES

ACP206: ECOLOGY

END OF FIRST SEMESTER EXAMINATIONS

NOVEMBER/DECEMBER 2016

LECTURER: MR. T. A. MTAITA

DURATION: (3HRS)

INSTRUCTIONS

1. Do Not Write Your Name On The Answer Sheets.
2. Use Answer Sheets Provided.
3. Begin Your Answer For Each Question On A New Page.
4. Credit Is Given For Neat Presentation Of Answers.



Course code: ACP 206

Course name: Basic Ecology

Answer five questions only

Question One

- a) Why study Ecology? [5]
- b) No species is found everywhere on earth. Expound. [5]
- c) Explain the complicating factors that can be encountered in studying a population. [10]

Question two

- a) What is the distinction between density dependent factors and density independent factors? [5]
- b) Compare and contrast the diet breadth of predators and herbivores. [5]
- c) Explain factors that change in a population. [10]

Question three

- a) Describe the concept of cleaner production and elaborate its main components. [10]
- b) Explain the potential consequences of global warming and climate change. [10]

Question four

Provide the meaning and the major causes and effects of any **five** of the following ecological concepts:

- 1. Desertification, [4]
- 2. Poverty and the environment, [4]
- 3. Environmental policy and legislation, [4]
- 4. Emigration, [4]

5. Environmental impact of small scale mining, and
6. Veld fires.

[4]

[4]

Question five

b) Explain the following ecological concepts:

i. Ecological pyramids,

[4]

ii. Biogeochemical cycles,

[4]

iii. Food chains and food webs

[4]

iv. Ecosystem components

[4]

v. Savannah

[4]

Question six

a) What are the four major characteristics of a community?

[8]

b) Explain competition, predation, herbivory, and mutualism as interactions that occur among and within populations.

[12]