



# TECHNICAL UNIVERSITY OF MOMBASA

*Faculty of Business & Social Studies*

DEPARTMENT OF HOSPITALITY & TOURISM

CERTIFICATE IN TOURS AND TRAVEL OPERATIONS

(CTTO S12)

**AES 1150 : ENVIRONMENTAL STUDIES**

END OF SEMESTER EXAMINATIONS

**SERIES:** DECEMBER 2013

**TIME:** 2 HOURS

**INSTRUCTIONS:**

- This paper consists of Sections **A** and **B**.
- Section **A** is **Compulsory**. Answer any **TWO** questions in Section **B**.
- Mobile phones are not allowed into the examination room.
- Cheating leads to disqualification.
- ***This paper consists of Three printed pages.***

## SECTION A (Compulsory) 30 Marks

### QUESTION 1

- a) Differentiate the following terms giving relevant examples.
- i) Renewable resources and non-renewable resources
  - ii) Abiotic factors and biotic factors
  - iii) Community and population
  - iv) Prey and predator.
  - v) Symbiosis and commensalism. (10marks)
- b) Highlight the role of the Lion as a keystone species in Lake Nakuru National Park using a suitable flow chart. (10marks)
- c) On an educational field trip to Amboseli National park student discovered that there were more herbivores than carnivores. Explain. (10marks)

## SECTION B (Answer any TWO questions) 40 Marks

### QUESTION 2

- a) List FIVE (5) conservation organizations operational in Kenya. (5 marks)
- b) In each of 2a, list THREE (3) core activities the organization is involved in. (15marks)

### QUESTION 3

- a) Differentiate between a food chain and a food web. (2 marks)
- b) With the aid of a diagram, illustrate a simple marine ecosystem food chain. (8 marks)
- c) List and briefly describe five ecosystems of East Africa. (10marks)

### QUESTION 4

- a) Define the term natural resources. (2marks)
- b) List Four renewable and FOUR non- renewable natural resources in Kenya (8marks)
- c) On a visit to Tsavo National Park, you see a herd of buffaloes accompanied by small heron- like Birds.
- i) What is the likely name for the white birds? (2marks)
  - ii) How do these birds benefit from associating with buffaloes. (4marks)
  - iii) How does the buffalo benefit from the association with the birds. (2marks)
  - iv) What is the name of this relationship? (2marks)

### QUESTION 5

With the aid of a diagram, discuss the role of mangroves and coral reefs in regulating marine

Ecosystems.

(20marks)