

### TECHNICAL UNIVERSITY OF MOMBASA

# FACULTY OF APPLIED AND HEALTH SCIENCES DEPARTMENT OF ENVIROMENT & HEALTH SCIENCES

## **UNIVERSITY EXAMINATION FOR:**

#### DIPLOMA IN ENVIRONMENTAL SCIENCE

DES/17S/YEAR 1/ SEMESTER 1
AES 2101 GLOBAL ECOSYSTEMS & ENV. ISSUES
SPECIAL/ SUPPLIMENTARY EXAMINATIONS
SERIES: SEPTEMBER 2018
TIME: 2 HOURS

#### **Instructions to Candidates**

This paper consists of FIVE questions
Answer question ONE (COMPULSORY) and any other TWO questions
This paper consists of two printed pages.
Mobile phones are NOT allowed in the examination room

#### **QUESTION ONE**

a) Differentiate between the following

i) Habitat and niche (4 marks)ii) Ecosystem and biodiversity (4 marks)

b) Briefly describe the process of nutrients cycling in the ecosystem. (5 marks)

c) Briefly describe the major drivers of environmental degradation in Kenya today

(5 marks)

d) Define the following categories of species in an ecosystem. (6 marks)

i. Autotrophs ii ii) Heterotrophs iii) Detritivores

e) Outline the characteristics of the individuals belonging to a population (6 marks)

#### **QUESTION TWO**

Discuss forest ecosystems under the following headings

- a) Consequences of their destruction (7 marks)
- b) Measures taken to save them (8 marks)

## **QUESTION THREE**

- A) As a current resident of the Coast region describe the threats facing Coastal and marine ecosystems. (10 marks)
- B) Outline measures that can be taken to lessen the above threats in (3A) above

(5 marks)

## **QUESTION FOUR**

Discuss any five Environmental Issues and Challenges facing Kenya today. (15 marks)

# **QUESTION FIVE**

Discuss the factors that drive dynamism of ecosystems (15 marks)