

## TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Applied & Health Sciences

# DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES & ELECTRICAL ENGINEERING

DIPLOMA IN ELECTRICAL POWR ENGINEERING (DEPE II)

## AES 2130 ENVIRONMENTAL STUDIES

SPECIAL/SUPPLEMENTARY EXAMINATIONS

**SERIES:** JULY, 2014 **TIME:** 2 HOURS

## **INSTRUCTIONS TO CANDIDATES:**

-Answer **ALL** questions in **SECTION ONE** and any other **TWO** in **SECTION TWO**. This paper consists of **TWO PRINTED** pages

**SECTION ONE: COMPULSORY** 

**QUESTION 1** 

a) Define the following terminologies:Sustainable Development (2 marks)

Global warming. (2 marks)

b) List TWO types of the Global commons (2 mark)

c) Briefly, describe the following waste disposal techniques: (4 marks)

(i) Landfill (4 marks)

(ii) Incineration (4 marks)

(iii) Recycle (4 marks)

d) Identify FOUR types of Environmental Management Tools. (4 marks)

e) (i) Explain TWO sources of water pollution. (4 marks)

(ii) Explain the Trickling Filter Process in sewage treatment process. (4 marks)

## **SECTION TWO**: Answer **ANY TWO** questions.

## **QUESTION 2**

a) Discuss THREE environmental Issues associated with climate change. (9 marks)

b) Suggest and explain appropriate solutions to the above mentioned problems. (6 marks)

#### **QUESTION 3**

Describe any FIVE pollutants of water resources (15 marks)

## **QUESTION 4**

Expound on the following indicators of sustainable development:

(i) Ecological footprint(5 marks)(ii) Human Development Index(5 marks)(iii) Gross National Happiness(5

(iii) Gross National Happiness marks)

## **QUESTION 5**

Discuss the challenges of Environmental mainstreaming in the development process. (15 marks)