

TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN ENVIRONMENTAL SCIENCE

DES/16S/YEAR 2/ SEMESTER 1

AES 2206 CLIMATE CHANGE AND MITIGATION 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 one printed pages.

Mobile phones are NOT allowed in the examination room

QUESTION ONE

A) Briefly describe climate change mitigation (4 marks)

B) Describe measures taken in energy conservation (6 marks)

C) Briefly describe activities that enhance adaptive capacity in communities in the face of climate change (5 marks)

D) Briefly explain climate change adaptation (4 marks)

A) Outline the greenhouse gases (5 marks)

B) Outline the major impacts of climate change (6 marks)

QUESTION TWO

Describe the human activities that lead to production of the following greenhouse gases (GHGs).

A) Carbon dioxide (5 marks)

B) Methane (natural gas) (5 marks)

C) Nitrous oxide (5 marks)

QUESTION THREE

Discuss steps taken to adapt to threats intensified by climate change, such as flooding, bushfires, heatwaves, and rising sea levels. (15 marks)

QUESTION FOUR

Discuss the following Physical evidence for climatic change

- a) Dendroclimatology (5 marks)b) Pollen analysis (5 marks)c) Insects (5 marks)
- **QUESTION FIVE**

Discuss the consequences of climate change in the agricultural sector (15 marks)