

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF
SCIENCE IN NATURAL RESOURCE MANAGEMENT**

NARE 881: CLIMATE CHANGE AND ECOLOGICAL PROCESSES

STREAMS: MSC (NARE) Y1S2

TIME: 3 HOURS

DAY/DATE: THURSDAY 08/04/2021

2.30 P.M – 5.30 P.M

INSTRUCTIONS:

Answer all questions in section A and any two in section B

Do not write anything on the question paper

SECTION A (20 MARKS)

1. Examine the role played by respective components of the Earth's system in controlling global climates. [5 marks]
2. Describe any two natural processes and show their contribution towards global climate change trends. [5 marks]
3. Discuss any two impacts of climate change on marine ecosystems. [5 marks]
4. Explain how historical perspectives and strategies for climate change mitigation and adaptation have influenced trends in the global debate on climate change. [5 marks]

SECTION B: (40 MARKS)

5. Using a typical ecosystem, discuss how climate change variability influences the relationships between ecological functions and services. [20 marks]
6. Critically examine the human role in controlling contemporary global warming trends and discuss the ecological impacts associated with climate change. [20 marks]

7. (a) Discuss the role of climate factors in determining the global patterns of ecosystems.

[20

marks]

- (b) Discuss how global biomes are impacted by climate change.

[10 marks]
