



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**FOURTH YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN EARTH SCIENCE WITH
INFORMATION TECHNOLOGY**

(MAIN CAMPUS)

NGA 413: CLIMATE CHANGE AND WATER RESOURCES

Date: 1st April, 2014

Time: 11.15am - 1.30pm

INSTRUCTIONS:

- Attempt QUESTION ONE and any other TWO questions.
- Sketch maps and diagrams should be used whenever appropriate.



NGA 413: CLIMATE CHANGE AND WATER RESOURCES

- Q1. (a) Explain the influence of the following systems to climate change and water resources:
- (i) Cryosphere. [5 marks]
 - (ii) Oceans. [10 marks]
 - (iii) Biosphere. [5 marks]
- (b) Discuss the effects of anthropogenic activities on climate change and water resources. [10 marks]
- Q2. Examine the climate-related and non-climatic drivers of freshwater systems in the future East African region. [20 marks]
- Q3. Discuss the response adaptation strategies that can be used to mitigate the climate change phenomena of Carbon dioxide capture and storage (CCS). [20 marks]
- Q4. Discuss the effects of water management policies and measures on green house gas (GHG) emissions and mitigation. [20 marks]
- Q5. Discuss the causes and effects of global warming. [20 marks]
- Q6. (a) Examine the Kyoto protocol and its achievement. [10 marks]
- (b) Discuss the role of national and international organisations in mitigating deforestation. [10 marks]