



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE
OF BACHELOR OF SCIENCE IN CLIMATE CHANGE AND
DEVELOPMENT WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

NCA 202: CLIMATE CHANGE IMPACTS AND VULNERABILITIES

Date: 12th January, 2016

Time: 8.30 - 10.30am

INSTRUCTIONS:

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



1a. Define the following terms in relation to climate change science

- i) Climate variability (2marks)
- ii) Vulnerability (2marks)
- iii) Adaptive capacity (2marks)
- iv) Sensitivity (2marks)
- v) Coping range (2marks)

b. Explain the concept of “Greenhouse effect” and show its impacts on the natural environment (10 marks)

c . Examine appropriate measures to mitigate climate change impacts from the energy sector (10marks)

2. Using illustrations examine the vulnerability of different service sectors to climate (20marks)

3. Explain the factors that enhance Africa’s vulnerability to climate change (20 marks)

4. Compare Outcome vulnerability and contextual vulnerability (20marks)

5. Using examples compare planned adaptation options and autonomous adaptation options (20 marks)

6. a. Explain the concept of social vulnerability (10 marks)

b. Evaluate how social vulnerability can hinder sustainable adaptation. (10 marks)