



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

**SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN CLIMATE CHANGE &
DEVELOPMENT WITH INFORMATION TECHNOLOGY
(MAIN CAMPUS)**

**NCA 202: CLIMATE CHANGE IMPACTS AND
VULNERABILITIES**

Date: 22nd November, 2013

Time: 8.30 - 10.30 a.m.

INSTRUCTIONS:

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

NCA202: CLIMATE CHANGE IMPACTS AND VULNERABILITY

- (a) Differentiate between the following with reference to climate change:
- (i) Potential impacts and Residual impacts. [4 marks]
 - (ii) Adaptation and adaptive capacity. [4 marks]
- (b) Outline any SIX generic signs of vulnerability to climate change applicable to all countries of the world. [6 marks]
- (c) Explain the THREE categories of issues that must be considered before beginning a climate change vulnerability assessment.[6 marks]
- (d) Explain any five reasons why developing countries are more vulnerable to droughts than developed countries. [10 marks]
2. Discuss any FIVE factors to consider while undertaking climate sensitivity analysis of a forest ecosystem. [20 marks]
3. Discuss any FIVE strategies utilized in Kenya to adapt to recurrent floods. [20 marks]
4. Discuss the impacts associated with climate change on agriculture and pastoralism in most African countries. [20 marks]
- 5.(a) Examine the barriers that can limit a coastal system's ability to adapt to a rise in sea- level [8 marks]
- (b) Explain any FOUR reasons why climate change vulnerability assessments should be done regularly. [12 marks]
6. Explain the vulnerabilities and impacts associated with climate change on the following sectors in Kenya:
- a) Energy sector [10 marks]
 - b) Health sector [10 marks]