



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

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

MAIN CAMPUS

NCA 204: CLIMATE CHANGE IN TEMPERATE REGIONS

Date: 5th December, 2016

Time: 12.00 - 3.00pm

INSTRUCTIONS:

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



- 1 a) Outline the typical characteristics of temperate regions (6marks)
- b) Explain the anthropogenic causes of climate change in the temperate regions (12 marks)
- c) Briefly, explain how global climate change will impact on food security in the temperate regions (6 marks)
- d) Write short notes on the “adaptation of the vegetation to the harsh conditions of the arctic tundra ” (6 marks)
2. a) Explain the factors influencing the health outcomes of climate change in temperate regions (12 marks)
- b) Explain how institutional capacity can be used as a resilience tool in addressing climate change impacts in temperate regions (8 marks)
3. Discuss the coping strategies that can be put in place to adapt to extreme temperatures in temperate regions (20 marks)
4. Explain why developed countries have a higher adaptive capacity to impacts of climate change compared to developing countries (20 marks)
5. a) Explain the meaning of the carbon footprint (4 marks)
- b) Discuss personal initiatives that people living in the temperate regions can put in place to reduce the carbon footprint (16 marks)
6. Discuss the biophysical response of agricultural crops to climate change in temperate regions (20 marks)