



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

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

MAIN CAMPUS

**NCA 407: ADAPTATION OF URBAN SYSTEM TO
CLIMATE CHANGE**

Date: 8th December, 2016

Time: 8.30 - 11.30 am

INSTRUCTIONS:

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

1. Write short notes on the following ;
 - a) Urban land use (10 marks)
 - b) Urban systems (5 marks)
 - c) Vulnerability of systems (15 marks)
2. Discuss the significance of preparing urban systems for climate change adaptation (20 marks).
3. Examine how the following sectors are affected by climate change in cities of Africa;
 - a) Energy (10 marks)
 - b) Public health (10 marks)
4. Explain **FIVE** tools for adaptation of urban systems to climate change (20 marks)
5. Discuss factors that will challenge urban planners while implementing the Climate Change Act, 2016 in Kenya. (20 marks)
6. Explain the options, barriers and strategies for adaptation of the following sectors; transport, industrial sector and waste sector (20 marks).