



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2015/2016**

**FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE  
DEGREE OF BACHELOR OF ARTS WITH INFORMATION  
TECHNOLOGY**

**CITY CAMPUS**

**PGS /PDM 412: URBAN RESILIENCE AND CLIMATE CHANGE  
ADAPTATION**

Date:19<sup>th</sup> April, 2016

Time: 9.00 - 11.00am

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**INSTRUCTIONS:**

- **Answer Question ONE and any other TWO Questions.**

1. a) Write short notes on the following (12 marks)
  - i) Social capital
  - ii) Carbon tax
  - iii) Climate systems
  - iv) Cap and trade system
- b) State FIVE measures that can be used to reduce transportation emissions of carbon. (5 marks)
- c) The vulnerability map can be used to decide where appropriate mitigation measures can be taken. Outline FIVE of these mitigation measures. (5 marks)
- d) Steinberg and Burby produced a 'Growing Safe' plan for communities based on EIGHT fundamental elements. State these elements. (8 marks)
2. a) Explain FIVE components that constitute a Disaster Management Master Plan according to Wenzel and Bendimerad. (10 marks)
- b) Outline the 10 step checklist proposed by UNISDR's 2010-2015 global campaign for Making Cities Resilient. (10 marks)
3. a) Discuss the SEVEN principles of Risk Management. (14 marks)
- b) Explain the THREE categories of risks. (6 marks)
4. Climate change impacts transpire gradually from the natural environment into the economies and society. Discuss the impacts of climate change. (20 marks)
5. a) Define the terms Hazard, Vulnerability, Exposure, Risk and Disaster. (10 marks)
- b) Explain the THREE basic principles for an asset-based adaptation strategy in the context of climate change. (10 marks)
6. a) Explain the various indicators of drought. (10 marks)
- b) Remote Sensing can accurately depict vegetation stress on rangeland. What are the advantages of using remote sensing for drought monitoring? (10 marks)