



# MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCE MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL STUDIES

SECOND YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR OF  
SCIENCE IN ENVIRONMENTAL COMMUNITY DEVELOPMENT

ECD 209: CLIMATE CHANGE AND COMMUNITY LIVELIHOODS

Date: 9/12/2016

Time: 2 HOURS

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## INSTRUCTIONS

This paper consists of FIVE questions.

Attempt question ONE (Compulsory) and any other TWO questions

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## QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Define the following terms:
- i) Weather (2 marks)
  - ii) Climate (2 marks)
  - iii) Climate change (2 marks)
  - iv) Emissions (2 marks)
  - v) Water cycle (2 marks)
  - vi) Resilience (2 marks)
  - vii) Vulnerability (2 marks)
- b) Differentiate between MITIGATION and ADAPTATION to climate change. (4 marks)
- c) Name the TWO (2) key policy/legislative documents aimed at combating climate change in Kenya. (4 marks)

- d) i) Explain what is meant by the term “the greenhouse effect” (2 marks)
- ii) Why the greenhouse effect is important to life on earth. (2 marks)
- iii) List FOUR (4) greenhouse gases. (4 marks)

**QUESTION TWO (20 MARKS)**

- a) What FIVE (5) actions does the acronym REDD+ come from? (5 marks)
- b) State TWO (2) differences between the Kyoto Protocol and REDD+. (4 marks)
- c) Explain FIVE (5) actions that Parties to REDD+ are encouraged to take to ensure the success of the initiative? (10 marks)
- d) Why is the Kyoto Protocol considered a milestone in the politics of climate change? (1 mark)

**QUESTION THREE (20 MARKS)**

Discuss FIVE (5) ways climate change will impact human beings in Africa. (20 marks)

**QUESTION FOUR (20 MARKS)**

Discuss TWO (2) constraints and TWO (2) opportunities arising from adaptation to climate change for each of these resources

- a) Water (4 marks)
- b) Agriculture (4 marks)
- c) Energy (4 marks)
- d) Transport (4 marks)
- e) Infrastructure (4 marks)

**QUESTION FIVE (20 MARKS)**

Discuss FIVE (5) ways through which climate change directly and indirectly impacts women more than it impacts men. (20 marks)