



The Co-operative University College of Kenya
(A Constituent College of Jomo Kenyatta University of Agriculture & Technology)

END OF SEMESTER EXAMINATION APRIL-2016

**EXAMINATION FOR THE DEGREE OF BACHELOR OF DISASTER RISK
MANAGEMENT (YR II SEM II)**

UNIT CODE: CODM 2210

UNIT TITLE: AGRICULTURE, FOOD SECURITY & ENVIRONMENT

DATE: 11TH APRIL, 2016

TIME: 2.00 P.M. – 4.00 P.M.

INSTRUCTIONS:

- Answer question **ONE (compulsory)** and any other **TWO** questions

QUESTION ONE

- (a) Describe the TWO (2) main agricultural systems practiced in Kenya. (10 marks)
- (b) Discuss the causes of food insecurity in Kenya (10 marks)
- (c) Describe at least FIVE (5) key economic and environmental impacts of drought. (10 marks)

QUESTION TWO

- (a) “..... Sustainable Agriculture is a journey, not destination”. Explain this statement and further substantiate on the three legged stool of sustainability. (10 marks)
- (b) Discuss the most common sustainable agricultural techniques used by farmers to achieve the goals of weed control, pest control, disease control, erosion control and high soil quality. (10 marks)

QUESTION THREE

- (a) Give an overview of the agricultural sector in Kenya. (6 marks)
- (b) Identify and elaborate on any FOUR (4) drought risk management techniques known to you. (14 marks)

QUESTION FOUR

- (a) Discuss some of the key negative effects of chemical fertilizers on nature and environment. (15 marks)
- (b) What corrective measures can one put in place to deal with the negative effects in question 4(a) above? (5 marks)

QUESTION FIVE

- (a) Agriculture is both a user as well as a producer of energy. Discuss this subject matter in light of agricultural and food system energy use. (15 marks)
- (b) List any strategies that farmers can put in place to reduce the amount of energy use on their farms? (5 marks)