



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY**

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**SECOND YEAR FIRST SEMESTER UNIVERSITY EXAMINATION  
FOR THE DEGREE OF BACHELOR OF SCIENCE IN ANIMAL  
SCIENCE AND BACHELOR OF SCIENCE IN FOOD SECURITY**

**2021/2022 ACADEMIC YEAR**

**REGULAR**

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**COURSE CODE: AAB 2205**

**COURSE TITLE: CLIMATE CHANGE AND FOOD SECURITY**

**EXAM VENUE:**

**STREAM: BSc. ANIMAL SCIENCE AND BSc. FOOD SECURITY**

**DATE:**

**EXAM SESSION:**

**TIME: 2 HOURS**

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**Instructions:**

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B.**
- 2. Candidates are advised not to write on question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**SECTION A [30 MARKS]**

**Answer ALL questions from this Section.**

1. Giving relevant examples, distinguish; between the following terminologies
  - a. climate change and global warming (2mks)
  - b. Climate Change adaptation and Climate change Mitigation (2mks)
  - c. Maladaptation and Carbon lock-in (2mks)
  - d. Climate Risks and Climate Shocks (2mks)
2. Explain five agricultural related adaptation measures to climate change (10 Marks)
3. Identify **four** key areas of mitigation of Climate Change (4Marks)
4. Briefly discuss the consequences of climate change on Food Security components (8 Marks)

**SECTION B [40 MARKS]**

**Answer ANY TWO questions from this Section.**

5. Discuss Climate Smart Agriculture and good farm management practices aimed at reducing the Climate Change impacts on food security (20 Marks)
6. The United Nations (UN) has hired you as a consultant, and you have been tasked to create awareness and educate the communities on how to cope with impacts of climate change in order to enable households to be food secure. As an expert, discuss how communities can be strengthened to enhance their resilience to climate shocks. (20 Marks)
7. Discuss measures that can be undertaken to reduce vulnerability of fisheries and aquaculture to the impacts of climate change. (20 marks)