



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**FIRST YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE OF
MASTER OF SCIENCE IN FOOD SECURITY AND SUSTAINABLE AGRICULTURE**

2020/2021 ACADEMIC YEAR

REGULAR

COURSE CODE: AFB 5112

COURSE TITLE: Climate Change Causes, Mitigation and Adaptation

EXAM VENUE: STREAM: MSc. Food Security and Sustainable Agriculture

DATE: 15/2/21

EXAM SESSION: 9-12 NOON

TIME: 3 HOURS

Instructions:

1. Answer question ONE and ANY other 2 Questions

2. Candidates are advised to write on the text editor provided, or to write on a foolscap, scan and upload alongside the question

3. Candidates must ensure they submit their work by clicking "finish and submit attempt" button at the end.

1. a) List and explain any two planetary boundaries that human activities are beaching? **(4 Marks)**
b) Explain at least two impacts of climate change. **(4 Marks)**
c) Differentiate between climate change mitigation and adaptation? **(4 marks)**
d) As a climate change project officer list three key areas required in building climate change resilience of a community. **(4Marks)**
e) Describe the key elements of climate vulnerability assessment. **(4 Marks)**

2. Climate change is inherently a justice issue. Discuss this using gender and climate change and climate change lens. **(20 Marks)**

3. Discuss with relevant examples the concept of Climate Smart Agriculture and the Climate Smart Agriculture readiness requirement. **(20 Marks)**

4. Climate change was conceived as a “risk multiplier” that could exacerbate security risks and conflicts in fragile regions and hotspots where poverty, violence, injustice, and social insecurity are prevalent. Discuss this sentence giving examples. **(20 Marks)**

5. As the new mister for agriculture and livestock in the countries list some of the climate change adaptation and mitigation measures will put in place to contribute to your country’s Nationally Determined Contributions (NDCs). **(20 Marks)**

