



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

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**THIRD YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR**

**DEGREE OF BACHELOR OF SCIENCE IN FOOD SECURITY**

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**2021/2022 ACADEMIC YEAR**

**COURSE CODE: AAB 2305**

**COURSE TITLE: WORLD FOOD ISSUES & HUMAN DEVELOPMENT**

**EXAM VENUE:**

**STREAM: 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.**

**SECTION A [30 MARKS]**

**Answer ALL questions from this Section.**

1. Briefly explain why food system transformation is necessary and how food scientist can contribute to this transformation ( 6 marks)
2. Briefly provide a guideline for healthy eating/healthy diet on ‘Eating sufficient vitamins’ ( 4 marks)
3. Briefly explain **three** reasons why edible insects are promoted as sustainable food resources for alleviating poverty and food insecurity ( 3 marks)
4. Outline the guiding principles for biofuel development that are likely to favor food security systems in developing nations ( 3 marks)
5. Briefly explain why population control as a measure for food security remain a contentious issue in especially in developing ( 3 marks)
6. Conflicts and wars are reported to be responsible for 65% of the people facing acute food insecurity. Briefly elaborate on how the Russia-Ukraine war has impacted the global economy and food security (6 marks).
7. The current world food situation is rapidly being redefined by new driving forces. Mention at least **five** forces that have shaped our current food systems ( 5 marks)

**SECTION B [40 MARKS]**

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

8. Nearly one-quarter of world’s food calories are lost or wasted between field and fork. Cutting this rate in half could close the food gap by about 20 percent by 2050. Explain clearly what needs to be done to prevent food losses and wastage to increase food availability ( 20 marks)

9. Discuss the major development issues in energy industry and food security showing how they influence each other ( 20 marks)
10. (a) ‘‘In Kenya today there is an increase in middle class population who are characterized by cases of over nutrition due to change in lifestyle’’ Discuss the above statement highlighting examples of over-nutrition related chronic diseases. ( 10 marks)
- (b) Using examples, explain the various factors that influence food intake (10 marks)
11. Climate change is a major threat to food security and livelihoods. Discuss how communities can be strengthened to enhance their resilience to climate shocks (20 marks)