



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY  
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**FIRSTYEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR  
THE DEGREE OF BACHELOR OF SCIENCE IN FOOD SECURITY**

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**2021/2022 ACADEMIC YEAR**

**COURSE CODE: AAB 2101**

**COURSE TITLE: INTRODUCTION TO FOOD SECURITY**

**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 TWO Questions in section B.**
- 2. Candidates are advised not to write on the 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. Give the meaning of the following terms used in food security
  - (a) Food security ( 1 mark)
  - (b) Malnutrition ( 1 mark)
  - (c) Food safety ( 1 mark)
  - (d) Safety net programmes ( 1 mark)
  
2. (a) What do you understand by the term “hunger”? (2marks )  
(b) Briefly explain why hunger can lead to malnutrition and why the absence of hunger does not imply the absence of malnutrition ( 4 marks)
  
3. Explain the following pillars/components of food security
  - a) Food availability (2 marks)
  - b) Food Accessibility (2 marks)
  - c) Food Utilization (2 marks)
  - d) Food system stability (2marks)
  
4. (a) Identify the **six** most vulnerable groups to food insecurity, giving reasons why you think they are more vulnerable (3marks)  
(b) Give **three** clinical symptoms for each of the following
  - (i) Kwashiorkor (3marks)
  - (ii) Marasmus (3marks)
  
5. In what ways do cultural beliefs influence the food security of a community? (3 marks)

**SECTION B [30 Marks]**

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

6. (a) Malnutrition is associated with food insecurity and can also relate to non-food factors. Discuss ( 10 Marks)  
  
(b) Coping Strategy Index (CSI) is one of the indicators for assessing the food insecurity of a community. Giving examples, discuss the **four** categories of food insecurity Coping Strategies (10 Marks)
  
7. Marsabit County in Kenya has reported serious cases of food insecurity and child malnutrition. Assume you have been appointed as a Food security expert in the County and charged with the responsibility of identifying feasible food security projects for funding in the region. Discuss **ten** priority projects that you

will recommend illustrating clearly their contribution to food security **(20 marks)**

8. (a) Briefly discuss **five** current major threats to global food security **(10 marks)**  
(b) Describe **five** possible strategies that you can recommend to the government of Kenya for implementation towards improving food security **(10 marks)**
  
9. (a) State the major principles of food handling **(4 marks)**  
(b) Discuss why food processing and food preservation are important in ensuring food security **(16 Marks)**