



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
COMMUNITY HEALTH AND DEVELOPMENT**

1ST YEAR 1ST SEMESTER 2018/2019

KISUMU CAMPUS

COURSE CODE: AFB 3111

COURSE TITLE: INTRODUCTION TO FOOD SECURITY

DATE: 25/4/19

EXAM SESSION: 9.00 – 11.00 AM

TIME : 2 HOURS

Instructions:

- 1. Answer all questions in section A and any other 2 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 the questions in this section

1. What do you understand by the term “poverty trap” in relation to food security? (2 Marks)
2. Define the following terms; (4 Marks)
 - (a) Food security
 - (b) Human poverty
3. Differentiate between water soluble and fat soluble vitamins (2 Marks).
4. List and explain any two pillars of food security (2 Marks)
5. How can availability of food as a pillar of food security be improved in Kenya? (4 marks)
6. State three differences between Chronic Food insecurity and Transitory Food insecurity (3 Marks)
7. Using examples name three biological hazards likely to contaminate food. (3 marks)
8. What are essential/indispensable amino acids? List three of these amino acids (4 Marks)
9. Mention two greenhouse gases that contribute to climate change (2 Marks)
10. Name factors that determine energy requirements of an individual? (4 marks)

SECTION B. (40 MARKS)

Answer any two (2) questions in this section

1. Discuss the following micronutrients with respect to their dietary sources, and disease condition caused by their deficiency: Vitamin A (Retinol), Vitamin C (Ascorbic Acid), Calcium and Iron (20 Marks)
2. (a) Explain the meaning of safety nets with respect to food insecurity and some 3 available options (10 Marks)
 - (b) State five causes of global climate change (10 Marks)
3. (a) Discuss five immediate causes of hunger (15 Marks)
 - (b) State any five impacts of food insecurity (5 Marks)
4. Explain four ways in which climate change affects food security and nutrition (20 Marks)