



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
PUBLIC HEALTH/ COMMUNITY HEALTH
1ST YEAR 2ND SEMESTER 2018/2019 ACADEMIC YEAR
NAMBALE CAMPUS**

COURSE CODE: AFB 3111

COURSE TITLE: INTRODUCTION TO FOOD SECURITY

EXAM VENUE: STREAM: BSc Public Health/ Community Health

DATE: 14/08/19 EXAM SESSION: 9.00 – 11.00 am

TIME: 2 HOURS

Instructions:

- 1. Answer all the 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: ANSWER ALL THE QUESTIONS IN THIS SESSION (30 MARKS)

1. Define the following terms using examples (2 marks)
 - a. Global warming
 - b. Energy balance
2. What do you understand by the term shrinkage ratio? (1 mark)
3. Name **FOUR** usage of energy in basal metabolism? (2 marks)
4. Why is it important to study issues related to food security? (2 marks)
5. Using examples differentiate between Essential and Non-Essential amino acids (2 marks)
6. Why is processing food such an important aspect in food security? (3 marks)
7. Malnutrition can be an outcome of food insecurity or it may be related to non-food factors. Mention some of these factors (3 marks)
8. Explain briefly some of the hazard groups likely to be found in food materials (3 marks)
9. Give reasons as to why economic growth is important in reducing food insecurity (4 marks)
10. How does culture influence food consumption in Kenya? (4 marks)
11. Giving examples show ways in which climate change can affect food availability (4 marks)

SECTION B: ANSWER ONLY TWO QUESTIONS IN THIS SESSION (40 MARKS)

1. a) Discuss some of the ways in which food insecurity can be measured (10 marks)
b) County A in Kenya has had issues with food security in Kenya for many years but the problem seems not to be solved by several leaders who have been in power for several years. You have been given a mandate to come up with a solution to this problem. What are the things you would do to improve food security in this County? (10 marks)
2. a) Discuss the major principles of handling food (10 marks)
b) Food quality can be judged by our own senses to know its attributes and the customers preferences. What are some this attributes that a consumer can sense? (10 marks)
3. a) What is food security and what are the pillars surrounding food security? (10 marks)
b) Population growth has lots of pressure to the food industry. Discuss? (10 marks)
4. a) Discuss some of the principles of food preservation (10 marks)
b) Discuss the factors that affect food security in Kenya? (10 marks)