



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

PUBLIC HEALTH/COMMUNITY HEALTH AND DEVELOPMENT

2ND YEAR 1ST SEMESTER 2024/2025 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE:	HCB 1209
COURSE TITLE:	FOOD SCIENCE AND TECHNOLOGY
EXAM VENUE:	STREAM: BSc Public/ Comm. Hlth & Dev
DATE:	EXAM SESSION:
TIME: 2.00 HOURS	

Instructions:

- 1. Answer all the questions in Section A and 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- ANSWER ALL QUESTIONS (30 MARKS)

1. Explain THREE main importance of food safety in food science.
2. Explain THREE major controversies surrounding GMOs.
3. Explain THREE reasons that make vacuum drying suitable for heat-sensitive foods.
4. Explain THREE major significance of microbiological analysis in identifying foodborne pathogens
5. Explain THREE main role of ELISA in food safety testing.
6. Describe THRE types of inspection of food premises
7. Explain THREE major importance of record-keeping in food safety.
8. Explain the importance of food labeling.
9. Explain how freeze-drying preserves the quality of food.
10. Explain the importance of food labeling.

SECTION B - ANSWER ANY TWO QUESTIONS FROM THIS SECTION

- 1i) Explain FIVE primary objectives of the food laws in your country
- 1ii) Explain how the inspection process works for food premises, detailing the key steps inspectors take to ensure compliance with safety regulations.
- 2i) Explain FIVE ways of how changes in scientific knowledge impact the interpretation and enforcement of food laws.
- 2ii) Describe FIVE common issues identified during inspections
- 3i) Describe FOUR potential benefits of genetically modified organisms (GMOs) in agriculture/food production.
- 3ii) Explain FIVE main areas in the ‘detailed findings’ part of components of a food plant inspection report
- 4i). Explain FIVE steps for conducting a food safety inspection to ensure compliance with food laws.

ii). Explain FOUR different factors that influence food spoilage