



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**FOURTH YEAR SECOND SEMESTER UNIVERSITY EXAMINATION FOR THE
DEGREE OF BACHELOR OF SCIENCE FOOD SECURITY**

2019/2020 ACADEMIC YEAR

SPECIAL EXAMS/RESIT

COURSE CODE: AFB 3422

COURSE TITLE: Food Quality Assurance and Control

EXAM VENUE:

STREAM: BSc. Food Security

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL the questions in section A and any TWO in section B.**
 - 2. Candidates are advised not to write on question paper.**
 - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**
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SECTION A [30 MARKS]

Answer ALL questions from this Section.

1. Explain the meaning of the following terminologies as used in food quality assurance and control
 - a. Food safety **(2 marks)**
 - b. Food hazard **(2 marks)**
 - c. Food quality audit **(2 marks)**

2. a. Explain three important components of food quality **(6marks)**
 - b. Using any **two** sensory parameters, explain how you will evaluate dairy milk to ascertain whether it is safe or unsafe for human consumption **(4 marks)**
 - c. Briefly explain any three Good Agricultural Practices that should be practiced by tomato farmers during harvesting to maintain quality of tomato fruits **(6 marks)**

3. a. What is ISO 2200 as used in food quality assurance and how is it beneficial to consumers **(3 marks)**
 - b. Explain the difference between is ISO 22000 and HACCP **(2 marks)**
 - c. How does KEBS protect consumers from unsafe food products **(3 marks)**

SECTION B [40 MARKS]

Answer any TWO QUESTIONS from this Section.

4. Quality improvement is still not a success story in the Kenyan food industry. Discuss possible challenges to food quality improvement in Kenya. **(20 marks)**

5. Discuss the **five** major factors affecting/limiting shelf- life and sensory properties of food, highlighting the cause/type of reaction involved and the undesirable effects resulting from the reactions **(20 marks)**

6. Dairy industry is an important agricultural sub-sector in Kenya's economy. However, lack of knowledge on best practices and constraints to improvement among smallholder farmers continue to hamper milk quality. You have been hired as a food quality expert to train small-holder dairy farmers in Nyandarua County on the best quality assurance and control practices in the dairy value-chain that will improve milk quality. Clearly explain the practices you will focus on , from milk production to consumption **(20 marks)**