



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 IN FOOD SECURITY**

2019/2020 ACADEMIC YEAR

REGULAR

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.
 - a) Define the following terminologies as used in food quality assurance
 - i. Food quality control [2 marks]
 - ii. Food quality audit [2 mark]
 - b) Give any four quality control laboratory requirements in manufacturing food products. [4 marks]
2. Using examples show the difference between
 - (a) An hazard and a risk [2 marks]
 - (b) Intrinsic and extrinsic attributes of food. [2 marks]
3.
 - a) How is food quality assurance and control important in food processing? [3marks]
 - b) Write a brief description for food quality and outline its's important components. [3marks]
4. What is 'CODEX ALIMENTARIOUS'? and state its significance in the global food systems. [3 marks]
5. Outline any **three** implementation procedures of Good Manufacturing Practices (GMP) in the food industries [4marks]
6. Give an example of food safety concern and make suggestion on ways to prevent or eliminate it. [3 Marks]
7. How is HACCP different from ISO22000 as quality management system. [2Marks]

SECTION B [30 MARKS]

Any two questions in this section

8. Taking any food of your choice as an example, describe in details the sensory evaluation of the food with respect to taste, smell, texture and colour[20 Marks]
9. Discuss Deming principles of total quality management. Clearly show its relevance in food quality management [20 Marks]

10. (a) Discuss causes of food deterioration and spoilage. Use examples to support your answers **[10 marks]**

(c) Propose **five** preservation processes for a selected food. Clarify the principles behind each preservation process proposed. **[10 Marks]**

11. Discuss HACCP (Hazard Analysis Critical Control Point) as a total quality management system. Show its application in food quality management **[20marks]**