



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES
FIRST SEMESTER FIRST YEAR EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN FOOD SECURITY 2020/2021 ACADEMIC YEAR**

COURSE CODE: AAB 2103

COURSE TITLE: Principles Of Human Nutrition

EXAM VENUE:

STREAM: (BSc. Food Security)

DATE:

EXAM SESSION:

TIME: 2HOURS

Instructions:

- 1. Answer ALL questions in Section A (compulsory) and ANY 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 [30 MARKS]

Answer ALL questions in this section

1. Define the following:
 - a. Nutrition - [1 mark]
 - b. Nutrients [1 mark]
 - c. Fortified food [1 mark]
2. Outline three functional categories of nutrients. [3 marks]
3. List three functions of water in the body. [3 marks]
4. Distinguish between fats and oils, and name one health risk associated with increased fat intake. [3 marks]
5. Outline three disorders associated with protein deficiency in humans. [3 marks]
6. Give any three basic characteristics of vitamins. [3 marks]
7. Phosphorus is said to have more functions than any other mineral in the body. State any three of these functions. [3 marks]
8. Differentiate between Estimated Average Requirements (EARs) and Recommended daily Allowances (RDAs). [4 marks]
9. Give two energy-generating pathways in the body. [2 marks]
10. Outline three disorders associated with excessive intake of alcohol. [3 marks]

SECTION B [40 MARKS]

Answer ANY TWO questions from this section

11. Discuss the digestive processes of starch and protein in the human body. [20 marks]
12. Describe the various methods of protein quality evaluation. [20 marks]
13. Give an account of the factors influencing food choices in humans. [20 marks]
14. Discuss the role played by food additives in human nutrition. [20 marks]