



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES
FIRST YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR DEGREE OF
BACHELOR OF SCIENCE IN FOOD SECURITY
2016/2017 ACADEMIC YEAR
REGULAR

COURSE CODE: AFB 3112

COURSE TITLE: PRINCIPLES OF HUMAN NUTRITION

EXAM VENUE: **STREAM: (BSc Food Security)**

DATE: **EXAM SESSION:**

TIME: 2 HOURS

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**
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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. Explore 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. Demonstrate an understanding of the factors influencing food choices in humans. (20 marks)
14. Evaluate the role played by food additives in human nutrition. (20 marks)