



**JARAMOGI OGINGA ODINGA UNIVERSITY OF
SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2012/2013
1ST YEAR 1ST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE (FOOD
SECURITY AND BIODIVERSITY)
(REGULAR)**

COURSE CODE: AFB 3112

COURSE TITLE: PRINCIPLES OF HUMAN NUTRITION

DATE: 1/5/2013 TIME: 9.00-11.00AM

DURATION: 2 HOURS

INSTRUCTIONS

- 1. This paper contains TWO sections.**
- 2. Answer ALL questions in section A (Compulsory) and ANY other Two questions in section B.**
- 3. Write all answers in the booklet provided.**

SECTION A: Answer ALL questions briefly and concisely (30 MARKS)

1. Define the following terms as it is used in nutrition
 - i) Balanced diet (1 mark)
 - ii) Nutritional genomics (1 mark)
 - iii) Glycemic index (1 mark)
 - iv) Protein turnover (1 mark)
2. Differentiate between the following terminologies
 - i) Peristalsis and segmentation (2 marks)
 - ii) Requirement and recommendation (2 marks)
3. Discuss briefly the importance of proteins in the diet (5 marks)
4. Briefly elaborate on the health consequences of high fibre diet (4 marks)
5. What is protein-energy malnutrition (PEM)? How do “Marasmus” and “Kwashiorkor” differ? (10marks)

SECTION B: Answer ANY TWO questions in this section(40 MARKS)

6. With help of illustrations briefly discuss Dietary Reference Intakes (DRIs) as important set of reference values for energy and nutrients that can be used for planning and assessing diets for healthy people. (20 marks)
7. You have just eaten French fries (chips). Describe what happens to the French fries as it passes through the GIT. Keep in mind that the French fries contain mainly carbohydrates and fats. (20 marks)
8. “In Kenya, there is an increase in middle class population who are characterized by cases of overnutrition due to change in lifestyle” Discuss the above statement highlighting examples of overnutrition-related chronic diseases. (20 marks)

END