



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

SECOND YEAR SECOND SEMESTER UNIVERSITY EXAMINATION FOR DEGREE

OF BACHELOR OF SCIENCE IN FOOD SECURITY

2022/2023 ACADEMIC YEAR

COURSE CODE: AAB 2202

COURSE TITLE: NUTRITIONAL DEFICIENCIES AND RELATED DISEASES

EXAM VENUE:

STREAM: BSC. FOOD SECURITY

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B.**
- 2. Candidates are advised not to write on question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator**

SECTION A [30 MARKS]

Answer ALL questions from this Section.

1. Differentiate between mild goiter and cretinism as forms of iodine deficiency disorder (IDD) (2 marks)
2. Describe the **three** common eating disorders highlighting the main difference between them (3 marks)
3. (a) How do “Marasmus” and “Kwashiorkor” differ? (4 marks)
(b) Write in detail about the (i) sources (ii) functions (iii) requirements and (iv) deficiency manifestations of calcium in the diet. (8 marks)
4. Describe 4 common micronutrient deficiencies prevalent in developing countries (4 marks)
5. Briefly explain the major lifestyle factors that are key determinants of obesity and overweight. (4 marks)
6. Vitamin D and Calcium deficiency are interrelated. Discuss the various symptomatic manifestation of their deficiencies in diet (4 marks)

SECTION B [40 MARKS]

Answer ANY TWO questions from this Section.

7. Vitamin A deficiency is the leading cause of preventable blindness in children and increases the risk of diseases and death. Elaborate on the sources, metabolic functions of Vitamin A and diseases associated with Vitamin A deficiency (VAD) (20 marks)
8. “*Nutrition-related diseases in the developing world are a manifestation of the intergenerational vicious cycle between undernutrition and poverty*”. Discuss the above statement by explaining the mechanism responsible for perpetuating the relationships over generations (20 marks)

9. Protein-energy malnutrition (PEM) is the leading cause of under five years deaths globally. Discuss PEM as a form of malnutrition and the risks factors associated, mentioning its management in children under five years old
(20 marks)