

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

# **UNIVERSITY EXAMINATIONS 2014/2015**

**SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN PUBLIC HEALTH /**

**BACHELOR OF SCIENCE IN PHYSIOLOGY**

**IPH 2201 : PRINCIPLES OF HUMAN NUTRITION**

**DATE: DECEMBER 2014 TIME: 2 HOURS**

**INSTRUCTIONS:**

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**SECTION A**

**1.**

1. Define the following
2. Food [1 mark]
3. Essential fatty acid [1 mark]
4. Health [1 mark]
5. Malnutrition [1 mark]
6. Denudation [1 mark]
7. Monosaccharide [1 mark]

2. Differentiate between fat soluble and water soluble vitamins [6 marks]

**3.** Describe the following :

1. Limiting amino acid [2 marks]
2. Complete protein [2 marks]
3. Saturated fatty acid [2 marks]

**4.** Describe six factors that determine protein requirement [6 marks]

**5.** Indicate in which part of the gastro intestinal tract the following enzymes are found and which foods they digest

1. Pepsin
2. Maltase
3. Amino peptidase
4. Trypsin
5. Pancreatic amylase
6. Lingual lipase [6 marks]

**5.** Match the following nutrients with the corresponding deficiency symptom [6 marks]

1. iodine beriberi
2. vitamin B12 rickets
3. fiber pernicious anaemia
4. thiamin neuro tube defect
5. vitamin D constipation
6. Folate Goitre

7. Outline the functions of water in the body [ 6 marks]

8. Describe the factors that determine basal metabolic rate [6 marks]

**SECTION B [22 MARKS] CHOOSE ONE QUESTION**

9. Discuss the factors that influence food choices [22 marks]

10. Discuss the causes, types and interventions to overcome protein and energy malnutrition in Kenya. [22 marks]

11. Discuss the importance of carbohydrates in the body and their link to health. [22 marks]