



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATION 2017/2018

DIGITAL SCHOOL OF VIRTUAL AND OPEN LEARNING

**SECOND SEMENSTER EXAMINATION FOR THE DEGREE OF
BACHELOR**

OF SCINCE (FOOD, NUTRITION AND DIETETICS)

HFN 212: NUTRITION BIOCHEMISTRY

DATE: MONDAY 18TH JUNE 2018

TIME: 11.00A.M.-1.00P.M.

INSTRUCTIONS

Answer Question ONE and any other TWO questions

1. Describe the following as applied in nutrition biochemistry
 - a) Hypocalcaemia (3 marks)
 - b) Glycemic index (3 marks)
 - c) MUFA (3 marks)
 - d) Glycolysis (3 marks)

2. a) Discuss **two** factors that determine the determine the protein quality of a food (6 marks)

- b) Define and list the essential amino acids. Which amino acids are regarded as indispensable? Explain (6 marks)

3. a) Define trans fatty acids and explain why they are not desirable in foods (4 marks)
b) Describe four function of lipids in the body (8 marks)
4. Describe four (4) classes of enzyme and give an examples of each. (8 marks)
5. Explain oxidative stress and the role of tocopherols(vitamin E) in defenses against it. (6 marks)
6. Describe the structure and function of **five** simple sugar in diet (10 marks)
7. Discuss the metabolism of carotenoids from human diet. (10 marks)