



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN FOODS, NUTRITION AND DIETETICS

HFN 409: FOOD PROCESSING, PRESERVATION AND STORAGE

DATE: Wednesday 4th March, 2012

TIME: 11.00 a.m. – 1.00 p.m.

INSTRUCTIONS

1. This exam has TWO sections, A and B.
2. Section (A) is **COMPULSORY**.
3. Attempt any TWO questions in Section (B).
4. Time allocated is 2 hours.

1. List six physiological factors responsible for food deterioration and spoilage. [3 marks]
2. Differentiate between **the** terminologies *Modified-Atmosphere Storage* (MAS) and *Packaging* (MAP) from *Controlled-Atmosphere Storage* (CAS) and *Packaging* (CAP). [1 mark]
3. List the main advantages of heat application in food processing. [6 marks]
4. Placing each in its distinct category, enumerate nine examples of Oligosaccharides found in biological systems. [6 marks]
5. With reasons, classify the following amino acids into their respective categories: [6 marks]
Lysine
Serine
Tyrosine
Threonine
Arginine
Glycine
6. The quality of raw food materials is judged upon four quality factors/characteristics. Briefly describe these characteristics. [8 marks]

SECTION B

7. Analyse the physical-chemical properties of food that influence the growth of microorganisms in a food material. [20 marks]
8. In tabular manner, summarize the main methods of food preservation, showing the effect and the disadvantages of each to a food product. [20 marks]
9. Through the use of examples, analyse the chemical factors responsible for food deterioration and spoilage. [20 marks]

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