



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

**SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE ENVIRONMENTAL HEALTH
HEH 109: FOOD SAFETY AND SANITATION**

DATE: Thursday, 29th March, 2012

TIME: 11.00 a.m. – 1.00 p.m.

INSTRUCTIONS:

SECTION A: Answer ALL questions (20 marks)

1. Define the following:
 - a) Food safety (2 marks)
 - b) Food borne disease (2 marks)
 - c) Aflatoxins (2 marks)
 - d) Pasteurization (2 marks)

2. Which foodborne pathogen causes the following disease?
 - a) Salmonellosis
 - b) Botulism
 - c) Perfringens
 - d) Vibronic enteritis
 - e) Shigellosis
 - f) Listeriosis
 - g) Trichinellosis, trichinosis
 - h) Viral gastroenteropathy

(8 marks)

3. Dehydration is a common process used in food production, applied to a diverse range of products.
- a) Explain the purpose of dehydration as a food safety control (2 marks)
 - b) Explain two limitations of the process in terms of the level of safety it provides (2 marks)

SECTION B: Answer Question ONE and any other TWO (50 marks)

4. With the help of a flow diagram, device a HACCP plan for a Hospital Kitchen (20 marks)
5. Standards of personal hygiene for food handlers are a crucial part of any food hygiene policy. Write an outline of a leaflet for food handlers that explains the requirements or standards you would expect under the following three headings:-
- a) Personal hygiene (5 marks)
 - b) Clothing (5 marks)
 - c) Health and illness (5 marks)
6. Write a brief essay on food as a vehicle of disease, giving examples of different types of agents (15 marks)
7. Describe the five keys to safer food as recommended by the World Health Organization (15 marks)