## TECHNICAL UNIVERSITY OF MOMBASA

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## DEPARTMENT OF ENVIROMENT AND HEALTH SCIENCES

# THE DEGREE OF BACHELOR OF SCIENCE IN COMMUNITY HEALTH

# BSCH 14J

# **APH 4405: FOOD SAFETY AND SECURITY**

END OF SEMESTER EXAMINATION

SERIES: APRIL 2016

TIME: 2 HOURS

#### INSTRUCTIONS TO CANDIDATE

## ATTEMPT QUESTION ONE(COMPULSAR) AND ANY OTHER TWO QUESTION

1, a, Define the following terms

- i , HACCP 2 marks
- ii, Food poisoning 2 marks
- iii, Food access 2marks
- b, Explain five effects of food borne illnesses on an establishment. 5 marks
- c, Distinguish between:
  - i, Chronic food insecurity and transitory food insecurity 4 marks
  - ii, Bacterial food intoxication and bacterial food infection 4 marks

d, Explain any FOUR hygienic practices by employees in a food establishment which promote food safety 4 marks

e, State four preventive measures of food poisoning. 4 marks

f, State FOUR importance of food fortification according to Food and Drug Regulations. 4marks

2, Food additives have been used in food for many years. Food drug regulations are specific about the levels used and some are associated with chronic diseases.

a , Describe the benefits of using food additives. 6 marks

b, Discuss the use of Sodium Nitrite as a preservatives. 14 marks

3, Discuss the factors that affect food security negatively and coping mechanisms adapted to deal with food insecurity.20 marks

4, Bacterial food poisoning is the most common microbiological contamination that cause food borne illness in many parts of the world today.

a, Explain the conditions that bacteria need to grow and multiply to cause food borne illnesses. 8 marks

b, With an aid of a diagram explain the phases for growth of bacteria. 12 marks

5, Discuss the principle of Hazard Analysis Critical Control Points (HACCP) for microbiological safety of foods in an establishment. 20 marks