



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF ENVIRONMENTAL SCIENCES

DEPARTMENT OF ENVIRONMENTAL SCIENCE

BACHELOR OF SCIENCE HONOURS DEGREE IN ENVIRONMENTAL SCIENCE AND
HEALTH

FOOD HYGIENE

ESH 2213

Final Examination Paper

March 2025

This examination paper consists of 3 pages

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: None

Examiner's Name: Mr C Sithole

INSTRUCTIONS

1. Answer any **FOUR** questions
2. Each question carries 25 marks

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
6.	25
TOTAL	100

1. (a) Explain 5 indicators of cockroach infestation in food premise. (5)
(b) Discuss factors that should be considered when siting food handling premises.
(20)

2. Discuss the factors that may lead to the review of a HACCP system program of a company of your choice.

3. (a) Explain any 5 requirements for growth of food poisoning bacteria. (15)
(b) Explain the following foodborne illnesses under the headings: incubation period, causative agent, foods involved and symptoms
 - i. Staphylococcus food poisoning (5)
 - ii. Clostridium botulinum (5)

4. (a) Describe, giving examples the following methods of food preservation
 - i. Curing / Salting (5 marks)
 - ii. Smoking of food (5 marks)
(b) As a food quality monitoring officer, explain how you would inspect the following:
 - i. Tinned food stuffs (7 marks)
 - ii. Eggs (8 marks)

5. (a) Explain the principles and steps of HACCP of a food manufacturing company of your choice. (15)
- (b) Explain 5 pre-requisite programs of HACCP. (10)
6. (a) Explain the chemical, physical, and mechanical means of eradicating rodents in food manufacturing industries. (10)
- (b) Describe the process of food premises inspection for licencing purposes. (15)