



UNIVERSITY OF SWAZILAND  
Faculty of Health Sciences  
Department of Environmental Health Science

DEGREE IN ENVIRONMENTAL HEALTH SCIENCE

**FINAL EXAMINATION PAPER 2019**

TITLE OF PAPER : FOOD QUALITY CONTROL

COURSE CODE : EHM 408

DURATION : 2 HOURS

MARKS : 100

INSTRUCTIONS :

- : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
- : **ANSWER QUESTION ONE AND ANY OTHER THREE QUESTIONS.**
- : EACH QUESTION **CARRIES 25** MARKS.
- : WRITE NEATLY & CLEARLY
- :
- : BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR.**

### QUESTION ONE

- (a) Define the following terms.
- (i) Control measure,
  - (ii) Corrective action,
  - (iii) Critical limit,
  - (iv) Critical control point,
  - (v) Food safety,
- (b) Write short notes on any four (4) pre-requisite programmes for Hazard Analysis Critical Control Point (HACCP) plan listed below.
- (i) Product recall and traceability programme,
  - (ii) Staff and product flow,
  - (iii) Sanitation Standard Operating Procedures (SSOP),
  - (iv) Refuse or waste control programme,
  - (v) Personnel hygiene programme,
  - (vi) Relevant training programmes,
  - (vii) Relevant records,

[Total: 25 Marks]

### QUESTION TWO

- (a) Discuss how you can establish HACCP plan in a food processing plant. [13 Marks]
- (b) Illustrate how Hazards Analysis Spreadsheets are filled out. Use examples from two different food products. [12 marks]

[Total: 25 marks]

### QUESTION THREE

- (a) Briefly discuss the main structural components of Food Standards. [5 Marks]
- (b) Discuss different forms of modified atmosphere packaging and its effects in food safety. [20 Marks]

[Total: 25 Marks]

### QUESTION FOUR

- (a) Briefly elaborate on the meaning of the following concepts.
- (i) Quality systems,
  - (ii) Quality management,
  - (iii) Quality assurance,
  - (iv) Quality control,
  - (v) Total quality management. [15 Marks]
- (b) Broadly discuss an example of joint FAO/WHO collective International Food Standards and Quality assurance commission with respect to its objectives, role and general content. [10 Marks]

[Total: 25 marks]

### QUESTION FIVE

- (a) Differentiate between the principles behind ISO 10011 and ISO 19011. [8 Marks]
- (b) Briefly discuss ISO 9000 Quality Management and Quality Assurance Standard. [8 marks]
- (c) List down Audit Scope and Auditee's activities. [9 Marks]

[Total: 25 Marks]