



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

DEGREE IN ENVIRONMENTAL HEALTH SCIENCE
SUPPLEMENTARY EXAMINATION PAPER 2019

TITLE OF PAPER : FOOD QUALITY CONTROL

COURSE CODE : EHS 424

DURATION : 2 HOURS

MARKS : 100

INSTRUCTIONS :

- : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
- : ANSWER **ANY FOUR** 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

With aid of flow diagram where possible, describe the 7 steps that a professional Consultant in food science would follow in establishing Hazard Analysis Critical Control Points (HACCP). [Total: 25 Marks]

QUESTION TWO

- (a) What are the Primary effects of CO₂ on microorganisms (with reference to CO₂ concentrations >10% CO₂)? [20 Marks]
(b) Give an account of mode of action of CO₂ in cells of microorganisms.[5 Marks]
[Total: 25 Marks]

QUESTION THREE

- (a) Some of the Food standards that are used to ensure that Food Quality is maintained in food on markets falls under ISO 9000 Series. Define and briefly outline what is ISO 9000? [10 Marks]
(b) Discuss the broad objectives of Audit. [8 Marks]
(c) Food safety generally refers to safety, hazards, and risk. Differentiate amongst Safe Food, Food Hazard, and Food Risk? [7 Marks]
[Total: 25 marks]

QUESTION FOUR

- (a) Define disinfection as used in the food industry. [3Marks]
(b) Describe the three categories of disinfection. [12 Marks]
(c) Detergent action is by reduction of surface tension that in turn enables detergent solutions to penetrate dirt and grease. The dirt is sometimes referred to as soils. Giving examples describe the types of soils? [10 Marks]
[Total: 25 marks]

QUESTION FIVE

- (a) Write short notices on the following;
(i) Staff and product flow , [5 Marks]
(ii) Control of suppliers, [5 Marks]
(iii) Relevant training programmes, [5 marks]
(iv) Standard Operation Procedure (SOP), [5 marks]
(v) Cleaning and disinfection programme. [5 marks]
[Total: 25 Marks]