

**UNIVERSITY OF SWAZILAND  
FACULTY OF HEALTH SCIENCES**

**BSC in ENVIRONMENTAL HEALTH SCIENCES**

**SUPPLEMENTARY EXAMINATION PAPER  
JULY 2015.**

**TITLE OF PAPER** : FOOD HYGIENE AND PRESERVATION

**COURSE CODE** : EHM 309

**DURATION** : 2 HOURS

**MARKS** : 100

**INSTRUCTIONS** :

- : ANSWER ANY FOUR QUESTIONS
- : EACH QUESTION CARRIES 25 MARKS.
- : WRITE NEATLY
- : BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

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

**Question 1**

- a) Discuss the effects of organic acids on microorganisms. [5]
  - b) Why organic acids cannot be used in foods with neutral pH [4]
  - c) How does wood smoke preserve food? [6]
  - d) Discuss the role played by food handlers in the reduction or elimination of food poisoning in restaurants. [10]
- [25 marks]

**Question 2**

- a) Quaternary Ammonium Compounds (Quats) are frequently preferred as equipment sanitizer. Why is that so? [10]
  - b) How does food preservation ensure food security? [10]
  - c) Discuss the importance of adding spices in food. [5]
- [25 Marks]

**Question 3**

- a) Explain the mechanism of preservation using sugar syrup and salt brine. [8]
- b) How does dehydration preserve foods? [8]
- c) Write short notes on food irradiation. [9]

[25 Marks]

**Question 4**

Discuss the strategies that should be implemented to improve the safety of street vended foods in Swaziland.

[25 Marks]

**Question 5**

The World Health Organization (WHO) has proposed five keys that when adhered to would ensure food safety. Explain these factors and show how they would contribute to food safety.

[25 Marks]