



**UNIVERSITY OF SWAZILAND**  
**Faculty of Health Sciences**

**DEGREE IN ENVIRONMENTAL HEALTH**  
**SUPPLEMENTARY EXAMINATION PAPER 2019**

- TITLE OF PAPER** : FOOD SAFETY & INSPECTION
- COURSE CODE** : EHM 410
- DURATION** : 2 HOURS
- MARKS** : 100
- INSTRUCTIONS** :
- : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
  - : ANSWER ALL FOUR (4) QUESTIONS
  - : EACH QUESTION CARRIES 25 MARKS.
  - : WRITE NEATLY & CLEARLY
  - : NO PAPER SHOULD BE BROUGHT INTO THE EXAMINATION ROOM.
  - : 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. How do prolonged storage, light and heat affect nutrients in fruits and vegetables? [5]
- b. Salmonellosis is significantly associated with poultry meat and eggs. Why is this so? [10]
- c. Choose any two (2) measures that are necessary to ensure milk safety and explain how these factors contribute in making sure that the milk we consume will not cause foodborne illness? [10]
- [25 Marks]

**Question 2**

There are two ways in which canned or bottled foodstuffs may be spoiled; it is either microbiologically or chemically. Explain how these two types of food spoilage affect canned food stuffs.

- a. microbial spoilage ( use at least two examples) [10]
- b. chemical spoilage ( use at least three examples) [15]
- [25 Marks]

**Question 3**

- a) Using appropriate examples, discuss antivitamins in food. [6]
- b) Write short notes on natural or intrinsic poison in foods. [6]
- c) Describe the possible rot that may be seen in cabbage or cauliflower. [8]
- d) What do you understand by foremilk? [3]
- e) How would you know that milk has been adulterated by using the milk fat?[2]
- [25 Marks]

**Question 4**

- a) Using good examples describe homofermentation and heterofermentation in dairy products. [8]
- b) Name two unripened and two mold ripened cheese. [4]
- c) Swiss cheese has holes or eyes, what forms the holes or eyes? [2]
- d) Why is phosphatase test important in milk? [3]
- e) Some molds cause specific spoilage to different fruits and vegetables. Match the fruit/vegetable to the mold that causes the spoilage. [8]
- Banana, citrus fruits, melons, grapes, lime, and eggplant
  - Botrytis sp., Diplodia citri, Alternaria citri, Anthracnose disease, Macropoma musae, Phomosis vexus
- [25 Marks]