



**1<sup>ST</sup> SEM. 2018/19**

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**UNIVERSITY OF SWAZILAND**

**RE-SIT / SUPPLEMENTARY EXAMINATION PAPER**

**PROGRAMME : FOOD SCIENCE, NUTRITION AND  
TECHNOLOGY, CONSUMER  
SCIENCE AND CONSUMER SCIENCE  
EDUCATION YEAR IV**

**COURSE CODE : FNS403 / FSNT402**

**TITLE OF PAPER : FOOD SAFETY AND PUBLIC  
HEALTH**

**TIME ALLOWED : TWO (2) HOURS**

**INSTRUCTIONS : ANSWER QUESTION ONE (1)  
AND ANY OTHER TWO (2)  
QUESTIONS.**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN  
GRANTED BY THE CHIEF INVIGILATOR**

**QUESTION 1 (COMPULSORY)**

a) Explain the following terms:

- i. Infection
- ii. Bacteria
- iii. Ready-to-eat food
- iv. Food safety
- v. Product recall

**(20 Marks)**

b) A foodborne illness can occur as a result of time-temperature abuse. Explain the meaning of time-temperature abuse and give **three (3)** examples of how food can be time-temperature abused.

**(10 Marks)**

c) State the major pathogen likely to contaminate the following foods:

- |                       |                           |
|-----------------------|---------------------------|
| i. Eggs               | vi. Fruits and vegetables |
| ii. Chicken           | vii. Oysters              |
| iii. Ground beef      | viii. Raw cheese          |
| iv. Cold meat         | ix. Cooked rice           |
| v. Ready-to-eat salad | x. Oxtail stew            |

**(10 Marks)**

**[TOTAL MARKS = 40]**

**QUESTION 2**

a) In your opinion, is there a major difference between foodborne disease outbreaks in developed countries and developing countries? Discuss in details citing examples where appropriate.

**(20 Marks)**

b) Discuss in detail **two (2)** ways in which you can prevent the occurrence of foodborne illness.

**(10 Marks)**

**[TOTAL MARKS = 30]**



QUESTION 3

- a) Discuss the 1<sup>st</sup> and the 5<sup>th</sup> principle of HACCP.

(20 Marks)

- b) You have been tasked to teach employees of a food establishment on personal hygiene. Discuss a sick worker as it relates to a food handler using examples of human illnesses that may be transmitted through food.

(10 Marks)

[TOTAL MARKS = 30]

QUESTION 4

- a) Give **four (4)** sources for detecting outbreaks.

(4 Marks)

- b) Discuss the **three (3)** hazard types giving **two (2)** examples for each type.

(15 Marks)

- c) A newly established food restaurant is interested in developing a food safety program. As a food safety specialist, discuss using **three (3)** points why this restaurant will benefit from establishing a HACCP system as part of their food safety program?

(6 Marks)

- d) Discuss the role of US CDC. Also name one organisation in Eswatini that performs similar role as US CDC.

(5 Marks)

[TOTAL MARKS = 30]