



1st SEM. 2017/18

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

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

COURSE CODE : 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.**

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GRANTED BY THE CHIEF INVIGILATOR**

QUESTION 1 (COMPULSORY)

a) Explain the following terms:

- i. Infection
- ii. Toxins
- iii. Foodborne outbreak
- 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) Discuss the role of CDC (USA) in food safety and public health. Name **one (1)** organization in Swaziland with a similar role to CDC.

(10 Marks)

[TOTAL MARKS = 40]

QUESTION 2

a) Discuss why Swaziland is challenged on food safety issues.

(10 Marks)

b) In your opinion, is there a major difference between foodborne disease outbreaks in developed countries and developing countries?

(10 Marks)

c) 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 2nd and the 5th principle of HACCP.

(20 Marks)

- b) You have been tasked to teach employees of a food establishment on personal hygiene. Describe using examples **two (2)** human illnesses that may be transmitted through food.

(10 Marks)

[TOTAL MARKS = 30]

QUESTION 4

- a) Explain the importance of investigating a foodborne disease outbreak. Also give **four (4)** sources for detecting outbreaks.

(25 Marks)

- b) For each of the following pathogens, give **one (1)** example of possible sources of contamination.

- i. *Salmonella*
- ii. *Listeria monocytogenes*
- iii. *Escherichia coli* O157:H7
- iv. Norovirus
- v. *Toxoplasma gondii*

(5 Marks)

[TOTAL MARKS = 30]