



1<sup>ST</sup> SEM. 2020/21

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**UNIVERSITY OF ESWATINI**

**FINAL EXAMINATION PAPER**

- PROGRAMME** : **FOOD SCIENCE, NUTRITION AND TECHNOLOGY, CONSUMER SCIENCE AND CONSUMER SCIENCE EDUCATION LEVEL 4**
- COURSE CODE** : **FNS403**
- 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. Food safety hazard
- ii. Cross-contamination
- iii. Potentially hazardous foods
- iv. Incidence
- v. Ready to eat food
- vi. Product recall

(30 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)

[TOTAL MARKS = 40]

**QUESTION 2**

Discuss the four (4) main categories of food contamination citing relevant examples under each category.

(30 Marks)

[TOTAL MARKS = 30]

**QUESTION 3**

a) Explain why hand washing is important for food handlers. Outline the safe hand washing steps necessary to prevent cross-contamination.

(10 Marks)

b) Discuss four (4) reasons why outbreaks of food borne diseases are investigated.

(20 Marks)

[TOTAL MARKS = 30]

QUESTION 4

- a) State the **major** pathogen likely to contaminate the following foods:
- i. Ground beef
  - ii. Polony
  - iii. Eggs
  - iv. Undercooked chicken
  - v. Ready-to-eat salad
  - vi. Fruits and vegetables
  - vii. Raw cheese
  - viii. Oxtail stew
  - ix. Ice

(18 Marks)

- b) Explain the following most significant food safety issues citing examples where appropriate:-
- i. Chemical contaminants in food
  - ii. Listeria outbreaks

(12 Marks)

[TOTAL MARKS = 30]