

2nd SEM. 2017/18



PAGE 1 OF 3

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME : FOOD SCIENCE, NUTRITION AND TECHNOLOGY YEAR III

COURSE CODE : FSNT 304

TITLE OF PAPER : FOOD QUALITY ASSURANCE AND CONTROL

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) Draw the Cause and effect diagram and explain its meaning in food quality. (10 Marks)
- (b) Explain the **four (4)** quality assurance steps within the PDCA model. (8 Marks)
- (c) Discuss the following principles of ISO 9001:-
- i. Customer focus
 - ii. Leadership
 - iii. Improvement
 - iv. Relationship management
- (d) What is traceability in food processing? (20 Marks)

(2 Marks)

[TOTAL MARKS = 40]

QUESTION 2

- (a) Discuss the GMP conditions under the following:-
- i. Personnel
 - ii. Plant and Grounds
 - iii. Sanitary facilities and controls
- (15 Marks)
- (b) Give a justification of why companies need a TQM system. (5 Marks)
- (c) Discuss the history of HACCP. (10 Marks)

[TOTAL MARKS = 30]

QUESTION 3

- (a) Explain the **five (5)** principles of ISO 14000 essentials. (15 Marks)
- (b) Discuss the **first** and the **fifth** principle of HACCP giving examples in each case. (15 Marks)

[TOTAL MARKS = 30]

QUESTION 4

- (a) Discuss the role of the following in relation to food standards: -
i. FDA (5 Marks)
ii. USDA (5 Marks)
- (b) Discuss in detail how ISO 22000 differ from ISO 9001. (10 Marks)
- (c) Justify the importance of PRPs and give 4 examples of PRPs. (5 Marks)
- (d) Explain **one (1)** intrinsic factor of food quality, supporting your answer using examples. (5 Marks)

[TOTAL MARKS = 30]