



**UNIVERSITY OF SWAZILAND**  
**FINAL EXAMINATION PAPER**

**PROGRAMME** : **BACHELOR OF SCIENCE IN FOOD  
SCIENCE, NUTRITION AND TECHNOLOGY  
YEAR III**

**COURSE CODE** : **FSNT 202**

**TITLE OF PAPER** : **FOOD QUALITY ASSURANCE & CONTROL**

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

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

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THE CHIEF INVIGILATOR**

**Question 1**

- (a) Explain the importance of 'establishing documentation and record keeping' in the HACCP Plan. [10 marks]
- (b) In the HACCP Plan, it is important to 'understand and know the product'. Explain this statement. [10 marks]
- (c) Explain why it is important to 'establish target levels and critical limits' (HACCP Principle 2) in the HACCP Plan. [5 marks]
- (d) List 5 main features (practices) of the Good Manufacturing Practices (GMPs). [5 marks]
- (e) Compare and contrast an 'organisation with a quality assurance programme' and 'an organisation without a quality assurance programme' with regards to the production of high quality products. [10 marks]

**[Total Marks = 40]****Question 2**

- a) Explain the statement, 'food quality'. [5 marks]
- b) List 5 objectives of quality control. [5 marks]
- c) Describe the differences between the 'common' and 'specific causes' of variation. [5 marks]
- d) Explain the function of the 'decision tree' used in the HACCP Plan. [5 marks]
- e) Explain the function of the 'cause and effect diagram', also known as the 'fishbone diagram'. [5 marks]
- f) Explain the standard for quality called 'company or voluntary label'. [5 marks]

**[Total Marks = 30]**

**Question 3**

a) Write notes on the following inspection methods:

i. Spot checks. [5 marks]

ii. 100 % inspection. [5 marks]

b) Explain the following sampling plans:

i. Multiple sampling. [5 marks]

ii. Sequential sampling. [5 marks]

c) Explain the following quality aspects:

i. manufacturing-based quality. [8 marks]

ii. user-based quality. [2 marks]

**[Total Marks = 30]**

**Question 4**

a) Describe the function of a typical 'acceptance sampling plan'. [7 marks]

b) List 5 challenges associated with the development and implementation of the HACCP Plan. [5 marks]

c) Give 3 factors which form the basis (essence) of the ISO quality system. [3 marks]

d) Explain the following quality costs:

i. Appraisal costs. [5 marks]

ii. Failure costs. [5 marks]

iii. Prevention costs. [5 marks]

**[Total Marks = 30]**

**END OF QUESTION PAPER**