



**1<sup>ST</sup> SEM. 2007/2008**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

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

**COURSE CODE : FSNT 202**

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

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

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

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GRANTED BY THE CHIEF INVIGILATOR**

**Question 1**

- (a) Describe the intrinsic and extrinsic quality attributes of food that affect consumer expectations and perception.  
[10 marks]
- (b) 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 and safe products.  
[10 marks]
- (c) Write a brief explanation of the main features (practices) of the Good Manufacturing Practices (GMPs).  
[10 marks]
- (d) The HACCP system has seven (7) principles used to identify specific hazards and preventive measures for their control. Choose any two principles and explain their function in the HACCP plan.  
[10 marks]

**[Total Marks = 40]**

**Question 2**

- a) Define food quality.  
[5 marks]
- b) Write a brief explanation of the main objectives of quality control.  
[5 marks]
- c) Explain the differences between common and specific causes of variation.  
[5 marks]
- d) With the aid labelled diagrams, describe the ideal location of the quality assurance department or section in a typical organisation.  
[5 marks]
- e) Write a brief explanation of the main objectives of quality control.  
[5 marks]
- f) Explain the differences between common and specific causes of variation.  
[5 marks]

**[Total Marks = 30]**

**Question 3**

- a) Write notes on the effectiveness of the following quality control methods:
- i. Spot checks [5 marks]
  - ii. 100 % inspection [5 marks]
- b) Explain the following terms used in acceptance sampling:
- i. Producer's risk ( $\alpha$ ) [5 marks]
  - ii. Consumer's risk ( $\beta$ ) [5 marks]
- c) Explain the following quality aspects:
- i. product based quality [5 marks]
  - ii. user-based quality [5 marks]
- [Total Marks = 30]**

**Question 4**

- a) Explain the importance of sample size (n) and acceptance level (c) in the design of acceptance sampling plans. [5 marks]
- b) Explain the purpose of quality audits. [5 marks]
- c) Give three factors which form the basis (essence) of the ISO quality system. [3]
- d) Give two reasons for conducting quality audit. [2 marks]
- e) With the aid of suitable diagrams, 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