

**2<sup>ND</sup> SEM. 2010/2011**



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**UNIVERSITY OF SWAZILAND**

**SUPPLEMENTARY EXAMINATION PAPER**

**PROGRAMME : BACHELOR OF SCIENCE IN 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 (2) QUESTIONS**

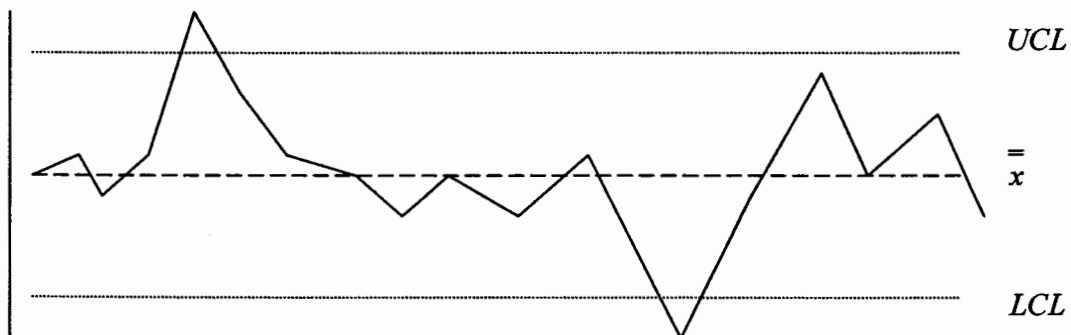
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GRANTED BY THE CHIEF INVIGILATOR**

**QUESTION 1 [COMPULSORY]**

- a) Discuss HACCP and its development in the food industry under the following:
- i. History of HACCP [10 Marks]
  - ii. Two food items in which HACCP system is compulsory and the agency regulating each food item in the USA. [4 Marks]
  - iii. HACCP certification. [6 Marks]
- b) Describe the four quality assurance steps within the PDCA model [12 Marks]
- c) Differentiate between TQM and SSOPs. [8 Marks]
- [40 Marks]

**QUESTION 2**

- a) Draw a flow diagram for bread, and identify the critical control points. [20 Marks]
- b) Interpret the meaning of the following control chart:



[10 Marks]

[30 Marks]

**QUESTION 3**

- a) Explain the significance of ISO 9001 certification [5 Marks]
- b) Discuss the importance of documentation and traceability in a food industry.  
[12 Marks]
- c) Name the three classification of hazards, giving two examples in each classification  
[9 Marks]
- d) Give two ways of performing corrective actions in the HACCP system  
[4 Marks]

**[30 Marks]**

**QUESTION 4**

- a) Discuss the Current GMP practice under the following headings:  
i. Sanitary facilities and controls  
ii. Sanitary operations  
[20 Marks]
- b) Describe the 5 principles of environmental management system (ISO 14000 series).  
[10 Marks]
- [30 Marks]**