

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



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**UNIVERSITY OF SWAZILAND**

**FINAL 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) Name a food safety body concerned with food safety in the following countries:

- i. South Africa
- ii. Botswana
- iii. Swaziland

[6 Marks]

b) Discuss two advantages of using a HACCP system in a food industry.

[4 Marks]

c) Define the following terms:

- i. Quality control
- ii. Quality assurance
- iii. Quality by design

[6 Marks]

d) List the standards which are covered by the Codex Alimentarius.

[8 Marks]

e) Explain the role of the following regulatory agencies in the United States:

- i. US FDA
- ii. USDA

[10 Marks]

f) Explain the two elements of Hazard Analysis.

[6 Marks]

[40 Marks]

**QUESTION 2**

Describe 6 elements of the ISO 9001 standards.

[30 Marks]

[30 Marks]

**QUESTION 3**

a) Draw a flow diagram for a beef sausage up to the point of cooking, and identify the critical control points.

[20 Marks]

b) Justify the need for food companies to use the ISO 22000:2005 standards.

[10 Marks]

[30 Marks]

**QUESTION 4**

a) Identify and explain 5 factors which may affect food quality. [10 Marks]

b) Discuss the Current GMP practice under the following headings:

- i. Personnel
- ii. Equipment and Utensils

[20 Marks]

[30 Marks]