

2ND SEM. 2011/2012



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FSNT 304 (M)**

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) Define the following terms:
- i. Quality assurance.
 - ii. Quality by design.
- [4 Marks]
- b) Name two applications of control charts giving examples in each application.
- [6 Marks]
- c) Explain traceability and its importance in food quality. [10 Marks]
- d) Explain the role of the following regulatory agencies in the United States:
- i. US FDA.
 - ii. USDA.
- [10 Marks]
- e) Discuss the first principle of HACCP. [10 Marks]
- [Total marks = 40]**

QUESTION 2

- a) Explain two types of auditing required to become registered for ISO 9001 standards in a food company, giving reasons why the audits are necessary. [10 Marks]
- b) Discuss the five principles of an environmental management system (EMS). [10 Marks]
- c) Describe the role of SWASA in relation to food standards, giving 4 examples of standards developed or adopted by SWASA. [10 Marks]
- [Total marks = 30]**

QUESTION 3

- a) Draw a flow diagram for processing of a fruit jam up to the point of packaging, and identify the critical control points. Explain each step and justify why a step is or is not a CCP. [20 Marks]
- b) As an external auditor of one of the food companies in Swaziland, you are required to justify the need for using the ISO 22000:2005 standards. [10 Marks]
- [Total marks = 30]**

QUESTION 4

f) Draw and describe the meaning of a cause and effect diagram (CED) and how it can affect food quality. [10 Marks]

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

- i. Sanitary operations.
- ii. Sanitary facilities and control.

[20 Marks]

[Total marks = 30]