

2ND SEM. 2009/2010



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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 306

TITLE OF PAPER : FOOD PROCESSING

TIME ALLOWED : TWO (2) HOURS

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

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN
GRANTED BY THE CHIEF INVIGILATOR**

QUESTION 1 [COMPULSORY]

- a) Discuss **four** reasons why food is processed. [12 marks]
- b) Explain the steps in yoghurt manufacture. [12 marks]
- c) Discuss **three** quality defects that may occur during yoghurt manufacture and give possible reasons for the defects [9 Marks]
- d) Explain how sausages are manufactured, stating the kind of equipment that is used for their manufacture. [7 Marks]

[Total = 40 marks]

QUESTION 2

- a) Explain the **four** major sources of milk contamination. [16 marks]
- b) Discuss Pasteurization and Ultra High Temperature (UHT) treatment. [10 Marks]
- c) Discuss **two** factors that may lead to milk variation. [4 Marks]

[Total = 30 marks]

QUESTION 3

- a) Explain the following processing methods of grains
 - i. Wheat milling
 - ii. Maize milling
 - iii. Wet milling
 - iv. Rice milling[20 marks]
- b) Define fruits and vegetables from the perspective of a Food Scientist and that of a Botanist. [5 marks]
- c) Explain the nutritional composition of fruits and vegetables. [5 Marks]

[Total = 30 marks]

QUESTION 4

- a) Discuss blanching and its role in food processing. [4 Marks]
- b) Discuss the **four** main ingredients that are used in bread making. [12 Marks]
- c) Discuss **four** ingredients used in sausage making. [8 Marks]
- d) Explain **three** quality defects that might take place in butter making. [6 Marks]

[Total = 30 marks]