

2<sup>ND</sup> SEM. 2017/2018



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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

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

**COURSE CODE** : **FNS208/FSNT 306**

**TITLE OF PAPER** : **FOOD PROCESSING I**

**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 (4)** reasons why food is processed. (12 Marks)
- (b) Explain the steps in yoghurt manufacture. (12 Marks)
- (c) Discuss **three (3)** 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 (4)** major sources of milk contamination. (16 Marks)
- (b) Discuss Pasteurization and Ultra High Temperature (UHT) treatment. (10 Marks)
- (c) Discuss **two (2)** 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 (4)** main ingredients that are used in bread making.

**(12 Marks)**

(c) Discuss **four (4)** ingredients used in sausage making.

**(8 Marks)**

(d) Explain **three (3)** quality defects that might take place in butter making.

**(6 Marks)**

**[TOTAL = 30 Marks]**