2<sup>ND</sup> SEM. 2012/13



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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME** 

BACHELOR OF SCIENCE IN FOOD SCIENCE,

NUTRITION AND TECHNOLOGY YEAR III CONSUMER SCIENCE EDUCATION, YEAR III

CONSUMER SCIENCE, YEAR III

**COURSE CODE** 

**FSNT 308** 

TITLE OF PAPER

FOOD PRESERVATION

TIME ALLOWED

TWO (2) HOURS

**INSTRUCTION** 

**ANSWER QUESTION ONE (1) AND** 

ANY OTHER TWO (2) QUESTIONS

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

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**FSNT 308 (M)** 

## **QUESTION 1(COMPULSORY)**

Describe and explain the theory, principles and practice underlying the following preservation methods.

(a) Dehydration	(8 Marks)
(b) Freezing	(8 Marks)
(c) Concentration	(8 Marks)
(d) Low acid foods canning	(10 Marks)
(e) Fermentation	(6 Marks)
	[TOTAL MARKS = 40]

## **QUESTION 2**

(a) Identify and describe the mode of action in the different methods of Drying/dehydration. For each method identify the groups of foods most suited to the respective method.

(18 Marks)

(b) Explain the reasons for preserving food.

(12 Marks)

[TOTAL MARKS = 30]

#### **QUESTION 3**

Define and explain the application of the following terms:

(a) Blanching	(5 Marks)
(b) Brine solution	(5 marks)
(c) D-value	(5 marks)
(d) Preservation	(5 Marks)
(e) Solid substrate fermentation	(5 Marks)
(f) Sprouting	(5 Marks)
	[TOTAL MARKS = 30]

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FSNT 308 (M)

# **QUESTION 4**

(a) Identify and explain the different methods of preservation by use of heat. Explain how preservation is effected in each of these methods. Give examples of the food products most suited to be preserved by these methods. (12 Marks)

(b) Explain the different ways in which losses can occur in foods.

(18 Marks)

[TOTAL MARKS = 30]