

2nd SEM. 2005/2006



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UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMME : BACHELOR OF SCIENCE IN HOME
ECONOMICS [FOOD SCIENCE AND
TECHNOLOGY OPTION] YEAR IV**

COURSE CODE : FST 401

TITLE OF PAPER : FOOD CHEMISTRY

TIME ALLOWED : TWO (2) HOURS

INSTRUCTIONS : ANSWER ANY FOUR (4) QUESTIONS

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GRANTED BY THE CHIEF INVIGILATOR**

PAGE 2 OF 2**QUESTION 1**

What is water activity? Discuss its role in food spoilage.

[Total = 25 marks]

QUESTION 2

Using structures to illustrate your answer describe the following:

- a. Sugar enantiomers [7 marks]
- b. Sugar epimers [7 marks]
- c. Sugar tautomer [6 marks]
- d. Deoxy-sugars [5 marks]

[Total marks = 25]

QUESTION 3

Briefly discuss:

- a. Cyanogenic glucosides [13 marks]
- b. Fatty acids in foods [12 marks]

[Total marks = 25]

QUESTION 4

Using structures to illustrate your answer, describe the two families of carbohydrates

[Total marks = 25]

QUESTION 5

- a. Briefly discuss the classification of proteins on the bases of structure. [15 marks]

- b. Describe any two amino acids that do not form the structure of proteins. [10 marks]

[Total = 25 marks]