



**2<sup>nd</sup> SEM. 2005/2006**

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**UNIVERSITY OF SWAZILAND**

**SUPPLEMENTARY EXAMINATION PAPER**

**PROGRAMME : DIPLOMA IN HOME ECONOMICS  
AND HOME ECONOMICS  
EDUCATION YEAR II**

**COURSE CODE : FN 201**

**TITLE OF PAPER : INTRODUCTION TO FOOD SCIENCE**

**TIME ALLOWED : TWO (2) HOURS**

**INSTRUCTIONS : ANSWER QUESTION ONE (1)  
AND ANY OTHER THREE (3)  
QUESTIONS**

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GRANTED BY THE CHIEF INVIGILATOR**

**QUESTION 1**

- a. Briefly explain the following:
- b. Oligosaccharides
- c. Crystallization
- d. Lipids
- e. Acidity
- f. Alkalinity
- g. Catalyst
- h. Holoenzyme
- i. Caramelization
- j. Galactose
- k. Food science

[Total marks = 40]

**QUESTION 2**

- a. What are the components of carbohydrates in food systems? [10 marks]
- b. In what form are carbohydrates stored in:
  - i. Plants
  - ii. Animals

[10 marks]  
[Total marks = 20]

**QUESTION 3**

- a. Explain the process of enzymic browning? [10 marks]
  - b. Explain the maillard reaction? [10 marks]
- [Total marks = 20]

**QUESTION 4**

- a. Discuss the properties of enzymes. [10 marks]
  - b. Name five classes of enzymes and give examples. [10 marks]
- [Total marks = 20]

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**QUESTION 5**

a. Explain the effects of the following on starch by giving brief description.

- i. Acid
- ii. Sugar
- iii. Oil

[10 marks]

b. Explain why egg white forms a foam when whisked, describe this process.

[10 marks]

**[Total marks = 20]**