



**2<sup>ND</sup> SEM. 2006/2007**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

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

**COURSE CODE : FST 512**

**TITLE OF PAPER : FOOD PROCESSING II**

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

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

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GRANTED BY THE CHIEF INVIGILATOR**

**QUESTION 1 [COMPULSORY]**

- a. What factors affect the melting point of fats? [6 marks]
- b. Give the difference between the terms 'pol' and 'brix' in sugar manufacturing terminology. [6 marks]
- c. Discuss the differences between fermentation as it refers to tea, coffee and wine processing. [10 marks]
- d. Discuss the importance of water quality in the manufacture of carbonated beverages. [6 marks]
- e. Discuss the processing procedures for making shortening. [12 marks]

**[Total Marks = 40]**

**QUESTION 2**

The melting point of fats and oils can be modified through hydrogenation or winterization. Discuss the two methods giving their advantages and disadvantages from a functional and nutritional points of view. [30 marks]

**QUESTION 3**

As a processor, how would you maximize sugar yield from sugarcane supplied by medium scale farmers? [30 marks]

**QUESTION 4**

Fruit juices and imitation juices (flavoured drinks) play an important role in the economy and wellbeing of the people Swaziland. Discuss this statement from your own experience and observations. [30 marks]

**QUESTION 5**

- a. Herbs and spices are used for their flavour modification properties. Discuss some of the problems that might be encountered in their use. [12 marks]
- b. Discuss the processing principles of making dry wine and sherry wine from red grapes. [18 marks]

**[Total = 30 marks]**