

2nd SEM. 2005/2006



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UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMME : DIPLOMA IN HOME ECONOMICS &
HOME ECONOMICS EDUCATION
YEAR III**

COURSE CODE : FN 302

TITLE OF PAPER : FOOD PRESERVATION

TIME ALLOWED : TWO (2) HOURS

INSTRUCTIONS : ANSWER ALL QUESTIONS

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

PAGE 2 OF 3**Question 1**

- a. Show the benefits and problems of using high temperature compared with low temperature in food preservation. [20]
- b. Is freezing appropriate for juicy fruits and similar vegetables? Why? [5]
- c. How do chemicals preserve food? [5]
- d. Explain food deterioration and spoilage under the following headings.
 - i. chemical activities [5]
 - ii. physical activities [5]

[Total marks 40]**Question 2**

- a. Why is nitrate used in meat products as a preservative even though it is suspected to be associated with ill health [10]
- b. How does traditional sun drying differ from modern solar drying in foods? [5]
- c. Using appropriate examples explain the purpose of fermentation of food? [8]
- d. What do you understand by food irradiation? [5]
- e. What does 'ISO' mean? [2]

[Total marks 30]**Question 3**

- a. A Sasox farmer has a bumper harvest this year, he is producing more tomatoes than the market can afford. What can he do with the tomatoes he can not sell? Support your answer. [10]
- b. Why is food safety very important in food production? [10]
- c. Why is *Clostridium botulinum* of importance in food canning? [5]
- d. Citrus fruits only require a temperature of less than 100 °C during canning. Why is that so? [5]

[Total marks 30]

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Question 4

The rapidly increasing global sourcing of raw materials and distribution of finished products make it imperative that governments cooperate at an international level to provide assurance of food safety. The “HACCP” method has been widely embraced by the food industries and by governments’ regulatory agencies because it has proven to be a cost effective means to prevent the occurrence of identifiable food-borne biological, chemical and physical hazards.

To show your understanding of the “HACCP” method as a preventative system, you are required to show all the seven steps and explain how each step is important in the maintenance of good quality food products.

[Total marks 30]