



1ST SEMESTER 2005/2006

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: B. Sc. HOME ECONOMICS IV, FST
OPTIONS;

COURSE CODE: FST 402

TITLE OF PAPER: FOOD PROCESSING

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY 4 QUESTIONS.

**THIS PAPER MAY NOT BE OPENED UNTIL THE CHIEF
INVIGILATOR HAS GRANTED PERMISSION.**

QUESTION 1

Briefly discuss:

- a) The reasons for milling (5 Marks)
- b) The milling process of maize (10 Marks)
- c) The reasons why finely milled maize is less nutritious than coarsely milled one (10 Marks)

QUESTION 2

- a) Discuss blanching principles and enzyme inactivation (13 Marks)

- b) Given: That incoming milk is 4°C; Pasteurized milk is 72°C; (12 Marks)

regeneration rate is 90%; **Calculate and show:**

- i) to what temperature will incoming milk be raised by regeneration?
- ii) to what temperature will pasteurized milk be cooled by regeneration?

QUESTION 3

Discuss freeze drying foods under the following headings:

- a) Principle (5 Marks)
- b) Effect of freeze drying on food texture (10 Marks)
- c) Effect of freeze drying on nutritional value (10 Marks)

QUESTION 4

Write short notes about the following:

- a) Exhaustion during sterilization (15 Marks)
- b) Four advantages of twin screw extruders (10 Marks)

QUESTION 5

- Discuss dehydration of food and its effect on food texture (25 Marks)