



# UNIVERSITY OF SWAZILAND

Faculty of Health Science

Department of Environmental Health  
Sciences

Main Examination 2010

Title of paper: FERMENTED FOODS

Course code: EHS 505

Time allowed: 2 hours

Marks allocation: 100 Marks

**Instructions:**

- 1) Read the questions and instructions carefully
- 2) Answer ANY FOUR (4) questions
- 3) Each question is weighted 25 marks
- 4) Write neatly and clearly
- 5) Begin each question in a separate sheet of paper

This paper is not to be opened until the invigilator has granted  
permission

**QUESTION 1**

- a) Briefly discuss 3 commonly used carbon sources and 2 commonly used nitrogen sources in most fermentation processes. (20 Marks)
- b) Briefly describe two possible sources of micro-organisms that can be used as fermentation starter culture. (5 Marks)

**QUESTION 2**

Discuss beers production outlining the four major steps involved. (25 Marks)

**QUESTION 3**

Explain four reasons for preventing contamination of fermentation systems and briefly describe five practices that you can employ to prevent contamination of your fermentation process. (25 Marks)

**QUESTION 4**

- a) Describe and illustrate the major phases of growth of culture during a fermentation process. (20 Marks)
- b) Explain the differences between idiophase and trophophase fermentation stages. (5 Marks)

**QUESTION 5**

Discuss the fermentation technology of fish sauces (25 Marks)