



2007/2008

UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: **BACHELOR OF SCIENCE IN ANIMAL
SCIENCE AND BACHELOR SCIENCE
IN AGRICULTURAL EDUCATION
YEAR IV**

COURSE CODE: **APH 404**

TITLE OF PAPER: **DAIRY TECHNOLOGY**

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

Compare and contrast acid and sweet cheese **(25 Marks)**

QUESTION 2

Discuss antibiotics in consumer milk under the following topics:

- a) Sources **(6 Marks)**
- b) Reasons for prohibition **(12 Marks)**
- c) Preventive measures **(7 Marks)**

QUESTION 3

Describe and illustrate the fermentation of lactose into various to organic compounds **(25 Marks)**

QUESTION 4

Briefly describe the following organisms and discuss their significance in dairy technology.

- a) *Saccharomyces cerevicie* **(5 Marks)**
- b) *Salmonella enteritidis* **(5 Marks)**
- c) *Lactobacillus delbruikii ssp bulgaricus* **(5 Marks)**
- d) *Penicilium roquefeti* **(5 Marks)**
- e) *Mycobacterium bovis* **(5 Marks)**

QUESTION 5

Discuss the structure and chemistry of the milk fat globule **(25 Marks)**