2nd SEMESTER 2007/2008

UNIVERSITY OF SWAZILAND

FINAL 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

Outline a cottage production technology for good quality yoghurt that has 15% (w/w) SNF. **(25 Marks)**

QUESTION 2

Discuss the classification of milk proteins. **(25 Marks)**

QUESTION 3

With regards to the fermentation of the following **products** give the: culture used; fermentation temperature; fermentation duration; amount (percentage) and type of major metabolite.

The products are: **(25 Marks)**

i) Koumis
ii) Swiss cheese
iii) Acidophilus milk
iv) Emasi
v) Kefir

QUESTION 4

Discuss two strategies that you can implement to preserve raw milk where cold storage is not possible **(25 Marks)**

QUESTION 5

Describe and illustrate the structures of the following milk biomolecules.

a) Lactose **(5 Marks)**
b) Triacylglyceriders **(5 Marks)**
c) Riboflavin **(5 Marks)**
d) Cholesterol **(5 Marks)**
e) Lysine **(5 Marks)**