



2008/2009

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: B. Sc. ANIMAL SCIENCE IV

COURSE CODE: APH 403

TITLE OF PAPER: DAIRY PRODUCTION

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

Discuss how the following factors can affect milk yield and composition:

- a) Stage of lactation (9 Marks)
- b) Genetics (9 Marks)
- c) Season (7 Marks)

QUESTION 2

In Mr. Maseko's dairy farm the milk proteins are very low yet the milk yields are also low. What are the possible causes for this rare phenomenon and what corrective measures can you recommend? (25 Marks)

QUESTION 3

Discuss two options for endogenous growth hormone manipulation in dairy Cattle. (25 Marks)

QUESTION 4

Discuss a non-invasive dairy manipulation strategy for improvement of milk yield that you can recommend to *Sengani* dairy farmers association that are currently milking their cattle once a day. (25 Marks)

QUESTION 5

A few years back, a dairy calf was produced by cloning in Africa, briefly describe this technology and state its limitations. (25 Marks)