



2nd SEM. 2011/2012

UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME: B. SC. ANIMAL SCIENCE IV AND
B.SC. ANIMAL SCIENCE DAIRY
OPTION**

COURSE CODE: ASD 303/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 feeding and nutrition of pre-pubertal heifers influences the development of the mammary gland and subsequent milk yielding capacity. (25 Marks)

Question 2

- a) Discuss the physiology of milk let down and hold up in the dairy cow (10 Marks)
- b) Discuss how the administration of exogenous bovine somatotropin influences lactation efficiency in the lactating cow. (15 Marks)

Question 3

Briefly discuss the following:

- a) Parturient paresis (9 Marks)
- b) Lactation persistency (8 Marks)
- c) Galactopoiesis (8 Marks)

Question 4

An aspiring commercial dairy farmer intends to produce milk economically on a farm in Swaziland:

- a) Briefly explain three dairy production systems that can be used. (9 Marks)
- b) Explain with justifications the system you would advise the farmer to practice for economic production. (16 Marks)

Question 5

You are asked to solve a problem of declining milk yield and milk fat content in a dairy farm. Explain the possible reasons for this and how this problem can be solved. (25 Marks)