

**UNIVERSITY OF SWAZILAND**

**FACULTY OF AGRICULTURE**

**DEPARTMENT: ANIMAL PRODUCTION AND HEALTH**

**FIRST SEMESTER EXAMINATIONS: 2004/2005**

**BACHELOR OF SCIENCE IN AGRICULTURE: APH OPTION  
YEAR IV**

**COURSE CODE: APH 403**

**TITLE OF PAPER: REPRODUCTIVE PHYSIOLOGY**

**TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN  
GRANTED BY THE CHIEF INVIGILATOR.**

**QUESTION 1**

- a) Discuss 5 factors that influence the postpartum interval to first oesturs in farm animals. (15 marks)
- b) Explain how and why testicular temperature is regulated. (10 marks)

**QUESTION 2**

What are the stages of parturition in the cow. Discuss the hormones involved in parturition, the organs that secrete these hormones and the functions of these hormones. (25 marks)

**QUESTION 3**

Discuss semen collection in the bull using the two most popular methods. (25 marks)

**QUESTION 4**

Ovigenesis (Oogenesis) is the formation and maturation of the female gamete. Discuss this process in farm animals during the foetal period and after puberty. (25 marks)

**QUESTION 5**

Discuss the following events in the male reproduction.

- a) Testicular descent. (15 marks)
- b) Blood testis barrier. (10 marks)

**QUESTION 6**

Describe the levels of the following hormones in the blood during the oestrous cycle in the cow. What are the functions and sources of these hormones. (25 marks)