

1<sup>ST</sup> SEM. 2013/2014

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

**PROGRAMME:** 

BSc. IN ANIMAL SCIENCE III: BSc. IN

ANIMAL SCIENCE (DAIRY OPTION) III

**COURSE CODE:** 

**AS 307** 

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 mammary gland development from before birth to late pregnancy and the hormones involved. (15 Marks)
- b) Explain in detail how progesterone maintains pregnancy. (10 Marks)

### **QUESTION 2**

Describe are the components of the male reproductive capacity and the factors that affect them. (25 Marks)

# **QUESTION 3**

- a) Explain sperm maturation and give 4 different examples of physical or biochemical changes that sperm undergo as they mature. (10 Marks)
- b) Discuss 5 factors that can influence postpartum interval to first oestrus. (15 Marks)

#### **QUESTION 4**

- a) Define ovulation. (5 Marks)
- b) Discuss the events, hormones, and enzymes involved in the process of ovulation in the cow. (10 Marks)
- c) Briefly explain how does stress affect reproduction in the bull.

(10 Marks)

### **QUESTION 5**

- a) Define puberty in both the male and the female. (6 Marks)
- b) Describe the changes that are associated with puberty and explain the causes for these changes in both the male and female.

(19 Marks)