



**1<sup>ST</sup> SEM. 2010/2011**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

**PROGRAMME: BACHELOR OF SCIENCE IN ANIMAL  
SCIENCE II**

**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) Describe the level of the following hormones in the blood during estrus, proestrus, metestrus, and diestrus: follicle stimulating hormone, luteinizing hormone, oestrogen, and progesterone. What are the functions and sources of these hormones? (15 marks)
- b) Discuss testicular descent in the male. (10 marks)

**QUESTION 2**

Discuss the following regarding reproduction in the male.

- a) puberty (5 marks)
- b) Libido (10 marks)
- c) Scrotal characteristics in relation to thermoregulation. (5 marks)

**QUESTION 3**

When is the first fertile postpartum oestrus observed in the pig, goat/ewe, and cow? What factors influence the attainment of first postpartum oestrus? (25 marks)

**QUESTION 4**

In both the male and female, the hypothalamus, anterior pituitary gland and the gonads control reproduction. Discuss how the above glands communicate in controlling reproduction in the male and female.

(25 marks)

**QUESTION 5**

- a) What are the functions of the epididymis, what changes do sperms undergo as they pass through the epididymis? Where in the epididymis do these changes occur?
- b) Discuss the mechanisms involved in the movement of the ovum to the site of fertilization after ovulation.

(15 marks)

(10 marks)