



UNIVERSITY OF SWAZILAND

1ST SEM. 2016/2017

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) Describe the level, functions, and sources of the following hormones in the blood during the oestrous cycle: follicle stimulating hormone, luteinising hormone, oestrogen and progesterone. (15 Marks)
- b) Discuss testicular descent in the male. (10 Marks)

QUESTION 2

- a) Describe the changes that spermatozoa undergo as they pass through the epididymis and specifically highlight where these changes occur. (15 Marks)
- b) Discuss the mechanisms involved in the movement of the ovum after ovulation to the site of fertilisation. (10 Marks)

QUESTION 3

Artificial insemination is not commonly practised in beef cattle commercial ranches in both developed and developing countries. Discuss why? (25 Marks)

QUESTION 4

Discuss how the hypothalamus, anterior pituitary gland and the gonads communicate in controlling reproduction in both the cow and the bull. (25 Marks)

QUESTION 5

- a) Discuss the management techniques to reduce the interval from parturition to first postpartum oestrus in the sow and cow. (15 Marks)
- b) Describe how a bull is managed during the breeding season. (10 Marks)