

UNIVERSITY OF SWAZILAND

1ST SEM. 2016/2017

SUPPLEMENTARY 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 two (2) major factors involved in thermoregulation in the testicle. (15 Marks)

b) Discuss fertilisation and the mechanisms that prevent polyspermy. (10 Marks)

QUESTION 2

- a) Discuss the formation and maturation of the female gamete in the cow during the foetal period and after puberty. (15 Marks)
- b) Describe how bull semen is evaluated including the importance of this process in male reproduction. (10 Marks)

QUESTION 3

Discuss the components of the male reproductive capacity and how the components are affected by other factors. (25 Marks)

QUESTION 4

Describe the events that occur in the different stages of the oestrous cycle and the hormones involved.

(25 Marks)

QUESTION 5

a) Explain how progesterone maintains pregnancy. (10 Marks)

b) Define puberty in the male including changes associated with the onset of puberty in the bull. (15 Marks)