



UNIVERSITY OF ESWATINI

1ST SEMESTER 2018 / 19

FINAL EXAMINATION PAPER

PROGRAMME: BSc. IN ANIMAL SCIENCE III, BSc. IN ANIMAL SCIENCE (DAIRY OPTION III)

COURSE CODE: ASC 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 the three (3) methods of semen collection in bulls. **(15 Marks)**
- b) Describe briefly the mechanisms of scrotal thermoregulation. **(10 Marks)**

QUESTION 2

Write short notes on the following:

- a) Blood – testis barrier **(6 marks)**
- b) Maternal recognition of pregnancy in cattle **(6 marks)**
- c) Pseudopregnancy in farm animals **(6 marks)**
- d) Factors affecting puberty in cattle **(7 marks)**

QUESTION 3

- a) Describe the process of folliculogenesis during fetal development and after puberty, including the hormonal control. **(15 Marks)**
- b) Discuss the advantages and disadvantages of artificial insemination in a commercial dairy enterprise. **(10 Marks)**

QUESTION 4

- a) Describe the process of fertilization in the cattle. **(15 marks)**
- b) Describe the mechanisms responsible for milk ejection in cattle. **(10 Marks)**

QUESTION 5

- a) Describe the three (3) stages of parturition in cattle including hormonal control. **(15 marks)**
- b) Discuss the causes of anestrus in farm animals. **(10 Marks)**