



**UNIVERSITY OF ESWATINI**

**1<sup>ST</sup> SEMESTER 2018 / 19**

**RE-SIT 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) Describe the four ( 4 ) stages of the bovine estrous cycle including the hormonal control of the cycle. (20 marks)
- b) State the possible causes anestrus in bovines. (5 Marks )

**QUESTION 2**

- a) Describe the three ( 3 ) stages of parturition in a cow, including hormonal control. (15 Marks )
- b) Describe bovine placentation and the transport of immunoglobulins across it. (10 marks )

**QUESTION 3**

- a) Describe breeding soundness examination in a bull including semen evaluation. ( 20 marks )
- b) Describe the blood-testis barrier and its significance. (5 Marks )

**QUESTION 4**

- a) Discuss the factors affecting the bull to cow mating ratio in beef herds. (15 Marks )
- b) Describe the process of spermatogenesis in a bull. ( 10 Marks )

**QUESTION 5**

- a) Describe any two ( 2 ) methods of estrous synchronization in beef cattle. ( 10 Marks )
- b) Describe the mechanisms of milk ejection in a cow. (10 Marks)
- c) Describe maternal recognition of pregnancy in pigs. (5 Marks )