



UNIVERSITY OF SWAZILAND

(1ST SEMESTER-2017/2018)

SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME: B. Sc. Animal Science Year 3
B. Sc. Animal Science Dairy Year 3

COURSE CODE: AS 307

TITLE OF PAPER: REPRODUCTIVE PHYSIOLOGY

TIME ALLOWED: TWO HOURS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

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THE CHIEF INVIGILATOR

QUESTION 1

- a) Discuss the management techniques to reduce the interval to first post-partum oestrus in the cow. (15 Marks)
- b) Describe the mechanisms involved in the transport of spermatozoa out of the testicle during spermatogenesis. (10 Marks)

QUESTION 2

Parturition in the cow is divided into three stages. Briefly describe these stages and the events that occur prior to the onset of the parturition. (25 Marks)

QUESTION 3

- a) Spermatozoa have to undergo two maturation processes in order to be able to fertilise the oocyte. Describe the two processes and where they occur in the male and female reproductive tracts. (15 Marks)
- b) Discuss fertilization and mechanism(s) that prevent polysemy. (10 Marks)

QUESTION 4

- a) Describe the blood levels, functions and sources of the following hormones during the oestrus cycle: follicle stimulating hormone, luteinising hormone, oestrogen and progesterone. (15 Marks)
- b) Describe the functions of the epididymis including changes that spermatozoa undergo as they pass through the epididymis. Where in the epididymis do these changes occur? (10 Marks)

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QUESTION 5

Describe the mechanisms of action of proteins and steroid hormones.

(25 Marks)