



UNIVERSITY OF ESWATINI

1st SEM. 2019/2020

FINAL EXAMINATION PAPER

PROGRAMME: B.Sc. AGRICULTURAL EDUCATION YEAR 2, B.Sc. ANIMAL SCIENCE YEAR 2 AND B.Sc. ANIMAL SCIENCE (DAIRY OPTION) YEAR 2

COURSE CODE: ASC207

TITLE OF PAPER: ANATOMY AND PHYSIOLOGY OF FARM ANIMALS

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 ONE

Write short notes on:

- (a) anatomy and physiology of farm animals. **(5 Marks)**
- (b) The cranial and caudal surfaces of both legs in cattle. **(10 Marks)**
- (c) The main divisions of the vertebral column. **(5 Marks)**
- (d) Explain how to differentiate the vertebra from each of the Vertebral column divisions in cattle. **(5 Marks)**

QUESTION TWO

- (a) Copy the table onto your answer book and complete it by filling your answers in empty boxes. **(15 Marks)**

	Thoracic cavity	Abdominal cavity	Pelvic cavity
Organ contents			
Boundaries			
Importance			

- (b) Differentiate compact bones and spongy bones. **(5 Marks)**
- (c) Compare rigor mortis and muscle contraction. **(5 Marks)**

QUESTION THREE

- (a) Describe the structural and functional organization of the foetal blood circulatory system in farm animals. **(15 Marks)**
- (b) List the modifications of the foetal blood circulatory system from that of the adult pulmonary and systemic blood circulatory systems. **(5 Marks)**
- (c) What are the reasons for the modification of the foetal blood circulatory system from that of the adult system? **(5 Marks)**

QUESTION FOUR

i) Copy the table onto your answer script, and fill up the blank spaces. **(15 Marks)**

	Name of cavity	Name of inner & outer layers	Name of fluid	Source of fluid	Organ contents
Pericardium					
Pleural membrane					
Peritoneum					

ii) Describe the sympathetic nervous system. **(10 Marks)**

QUESTION FIVE:

(a) Discuss the anatomy and physiology of the respiratory pumping apparatus. **(20 Marks)**

(b) Explain how milk production is continued and maintained during the lactation period. **(5 Marks)**

END OF QUESTION PAPER