UNIVERSITY OF SWAZILAND
SUPPLEMENTARY EXAMINATION PAPER

PROGRAMME	:	**B. SC. IN AGRICULTURAL EDUCATION YEAR II AND B. SC. IN ANIMAL SCIENCE YEAR II**
COURSE CODE	:	**APH 201**
TITTLE OF PAPER	:	**ANATOMY AND PHYSIOLOGY**
TIME ALLOWED	:	**TWO HOURS**
INSTRUCTIONS	:	**ANSWER ANY FOUR QUESTIONS**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HÁS BEEN
GRANTED BY THE CHIEF INVIGILATOR**

QUESTION ONE

a. Give an account and the importance of the descriptive terms used in the study of anatomy and physiology.   (10 Marks)

b. Name the components of the appendicular skeleton of farm animals.
                                                                (5 Marks)

c. Name and define the two attachments of skeletal muscles and then give an account of the types of skeletal muscles found in farm animals indicating the requirement for all of these types in order for them to effect movement across a joint.   (10 Marks)

QUESTION TWO

a. Describe the structural organisation of the conducting portion of the respiratory system and give an account of the function (s) of the portion.
                                                                (15 Marks)

b. What is the organisational relationship (s) between the distal part of the conducting portion and the pulmonary blood circulatory system?
                                                                (5 Marks)

c. Give an account of how the pumping apparatus of the respiratory system functions   (5 Marks)

QUESTION THREE

Describe the structural organisation and the functions of the lymphatic system of farm animals.   (25 marks)

QUESTION FOUR

a. Give an account of the types of animals according to the natural eating habits and/or type of foodstuffs they naturally eat.   (10 Marks)

b. Describe the structural and functional organisation of the digestive system of ruminants.   (15 Marks)

QUESTION FIVE

Describe the events and hormonal changes that take place during the oestrous cycle of a cow.   (25 Marks)

QUESTION SIX

a.   Describe the location and the structure of mammary glands of cattle.

(20 Marks)

b.   Describe the role (s) played by the hormones oestrogen and progesterone in the development and oxytocin in the function of the mammary glands.

(5 Marks)