



UNIVERSITY OF SWAZILAND

1ST SEM. 2015/2016

SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMME: BSc. AGRICULTURAL EDUCATION YEAR 2, BSc.
ANIMAL SCIENCE YEAR 2 AND BSc. ANIMAL
SCIENCE (DAIRY OPTION) YEAR 2**

COURSE CODE: AS 201

TITLE OF PAPER: ANATOMY AND 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 ONE:

- a. List the different parts of the vertebral column. **(6 Marks)**
- b. List the anatomical difference between the vertebrae of the vertebral column. **(6 Marks)**
- c. Name the type of joint and cartilage found in between vertebrae. **(3 Marks)**
- d. Describe the Pelvic Girdle. **(4 Marks)**
- e. List the contents of the Pelvic Cavity. **(3 marks)**
- f. What is the clinical importance of the Pelvic Cavity? **(3 Marks)**

QUESTION TWO:

Write short Notes on:

- i. Estrus signs in pigs. **(5 Marks)**
- ii. A pneumatic bone. **(5 Marks)**
- iii. Classification and function of muscles. **(5 Marks)**
- iv. Sympathetic and parasympathetic nervous systems. **(10 Marks)**

QUESTION THREE:

- a. Describe the three(3) layers of an animal skin. **(9 Marks)**
- b. Describe the primary functions of the animal skin. **(10 Marks)**
- c. List three(3) applied uses of an animal skin. **(6 Marks)**

QUESTION FOUR:

Describe the process of digestion and absorption in poultry, outlining the following subtopics;

- a. Anatomic features and physiologic functions from the beak to the large intestine/colon. **(15 Marks)**
- b. Chemical and physical digestion. **(10 Marks)**

QUESTION FIVE:

- i. Draw and label the structure of a synovial joint. **(10 Marks)**
- ii. Describe the classification of joints in farm animals. **(5 Marks)**
- iii. Describe the healing process in bone fracture and explain the importance of exercise in bone fracture healing. **(10 Marks)**