UNIVERSITY OF SWAZILAND

1st SEM. 2014/2015

SUPPLEMENTARY 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: AS 201

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

(a) Define Anatomy and Physiology of farm animals and discuss its importance. **(15 Marks)**

(b) Describe the body cavities and body membranes, mention any clinical significance associated with them. **(10 Marks)**

QUESTION TWO

Compare between:

(a) Compact bone and spongy bone. **(7 Marks)**

(b) Stomach of cattle and the pig. **(10 Marks)**

(c) Smooth and skeletal muscles . **(8 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

Discuss the developmental stages of the mammary gland in cattle. **(25 Marks)**

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QUESTION FIVE:

Explain and/ or contrast the following:

(a) Terminal and respiratory bronchioles. **(5 Marks)**

(b) Digestion in the cattle rumen and in poultry. **(10 Marks)**

(c) How milk production is continued and maintained during the lactation period. **(10 Marks)**