



UNIVERSITY OF SWAZILAND

1st SEM. 2017/2018

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: ASC 207

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 1

a) List ten (10) structure organization of the conducting portions of the respiratory system of farm animals.

(10 Marks)

b) List three (3) accessory glands of the male reproductive system.

(3 Marks)

c) Draw a table on **Cranial Nerves** with **four (4) columns**, label each column as follows;

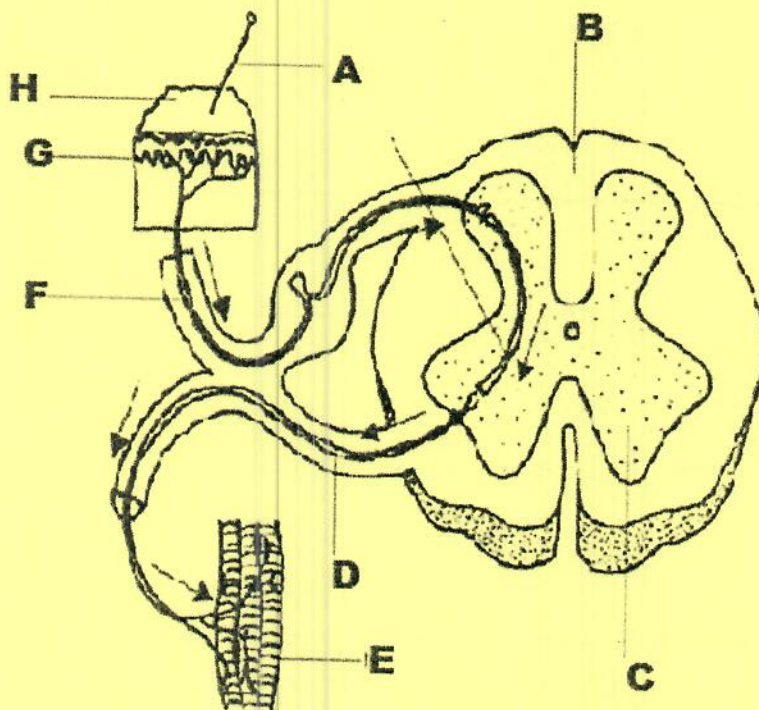
(12 Marks)

- i. Roman Number
- ii. Specific Name
- iii. Distribution
- iv. Functions

QUESTION 2

a) Figure 1 below shows the somatic spinal reflex. Name the parts labeled A to H in the figure.

(8 Marks)



b) Using figure 1 above describe the relationship between sensory, relay and motor neurons in the transmission of stimuli.

(17 Marks)

QUESTION 3

(a) Describe the functions of the endocrine system (4 Marks)

(b) List examples of each of the following (6 Marks)

Hormone type	Example
Protein	
Steroids	
Amino acid derivative	

(c) Write short notes on the following; (6 Marks)

- i. Islets of Langerhans/Pancreas
- ii. Parathyroid gland
- iii. Pituitary gland

(d) List four (4) types of the Blood Circulatory systems (4 Marks)

(e) Explain the reasons for the modifications of the foetal blood circulatory system. (5 Marks)

QUESTION 4

Write notes on the following:

a. The classification of joints (6 Marks)

b. Marbling (6 Marks)

c. Oestrous signs in cattle (4 Marks)

d. The role of the epiphyseal cartilage in the long bone (5 Marks)

e. The role of articular cartilage in a long bone (4 Marks)

QUESTION 5

Describe and explain the respiratory pumping apparatus. (25 Marks)