



SIR ARTHUR LEWIS COMMUNITY COLLEGE
 DIVISION OF AGRICULTURE
 END OF SEMESTER ONE EXAMS DECEMBER 2017
 ASSOCIATE DEGREE IN GENERAL AGRICULTURE
 ANIMAL SCIENCE- ASC 102

Date: 15th December, 2017

Duration: 2 ½ hrs

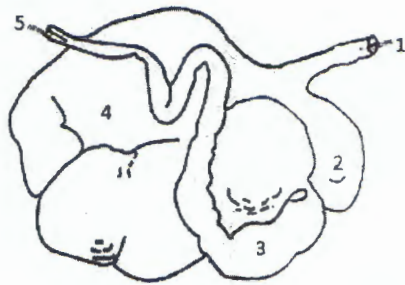
Time: 9:00 a.m.

This paper consists of FIVE (5) questions. You are to answer ALL. Marks allocated to each part of a question are indicated in brackets at the end of each part.

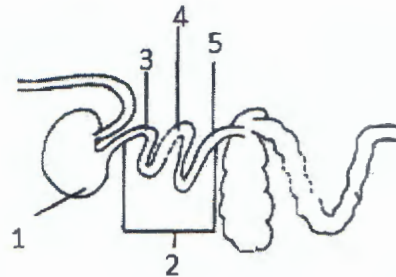
1. DIGESTIVE SYSTEM

The process of digestion occurs differently in animals based on the diets they consume.

- a. Diagrams A and B illustrate two types of digestive systems found in farm animals. For EACH diagram, correctly identify the structures labelled 1-5.



A



B

[10 marks]

- b. Briefly compare the process of digestion between these two animals.

[10 marks]

2. NERVOUS AND ENDOCRINE SYSTEMS

- a. Complete the following table comparing the endocrine and nervous systems.

[10 marks]

Characteristic	Endocrine system	Nervous system
General function		
Reaction to stimuli		
Duration of effects		
Chemical messenger		
Target tissues		



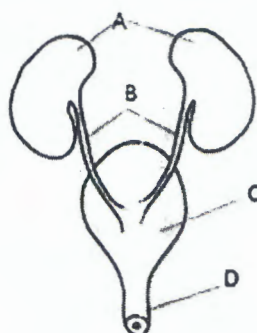
- b. Which endocrine gland acts as the link between the nervous system and the endocrine system? [1 mark]
- c. Complete the following table that relates to endocrine glands, their hormones and hormone function in an animal's body. [10 marks]

Endocrine gland	Hormone	Function
	Growth hormone	
	Luteinizing hormone	
	Oxytocin	
	Epinephrine and norepinephrine	
	Testosterone	

- d. Using a clearly labelled diagram to assist you, explain the reflex arc. Be sure to indicate the roles of each type of neuron involved. [12 marks]

3. URINARY SYSTEM

- a. Correctly identify the structures labelled A-D in the following diagram [4 marks]



- b. State ONE (1) function of EACH part. [4 marks]
- c. Briefly explain what happens in the part labelled A. [10 marks]

4. REPRODUCTIVE SYSTEM

- a. What are the TWO (2) MAIN functions of the testes? [2 marks]
- b. Which part of the organ is responsible for performing EACH function? [3 marks]
- c. Give THREE (3) functions of the female reproductive system. [3 marks]
- d. The oestrus cycle can generally be divided into FOUR (4) stages although some species undergo a fifth stage.
- Name these FIVE (5) stages. [5 marks]
 - Briefly explain what happens in EACH stage. [20 marks]



4. **ANIMAL TISSUES.** Complete the following concept map which relates to animal tissues. [36 marks]

