

SIR ARTHUR LEWIS COMMUNITY COLLEGE  
 DIVISION OF AGRICULTURE  
 END OF SEMESTER ONE ALTERNATE EXAMS  
 ACADEMIC YEAR 2017/2018



ASSOCIATE DEGREE IN GENERAL AGRICULTURE  
 ANIMAL SCIENCE- ASC 102

**Duration:** 2 ½ hrs

**Time:** 9:00 a.m.

**Date:** Thursday 1<sup>st</sup> February, 2018

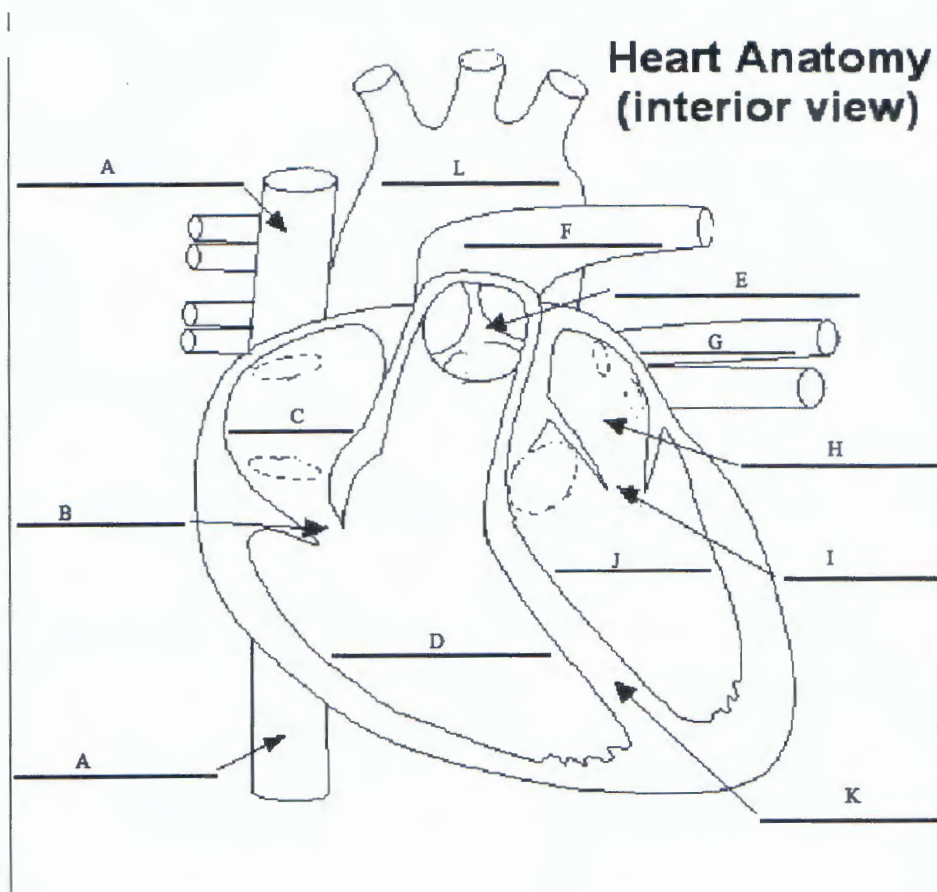
**Directions:** Answer all questions on this paper.

1. Cells reproduce through what is known as the cell cycle.  
 With the aid of diagrams, explain the cell cycle of a somatic cell. [20]
2.
  - a. Using ANY six (6) hormones, complete the following table by indicating the hormone, the gland where each hormone is produced and ONE function of each hormone.  
 [18]

HORMONE	GLAND WHERE PRODUCED	FUNCTION

- b. Which endocrine is considered to be the master endocrine gland? Give one reason for your answer. [2]
3. The following terms all refer to the nervous system.
  - a. Differentiate between the following pairs of terms; [6]
    - i. **Central nervous system (CNS)** and **peripheral nervous system (PNS)**

- ii. **Afferent and efferent** nerves.
  - iii. **Somatic nervous system and autonomic nervous system**
- b. By what other names are afferent and efferent nerves known? [2]
- c. 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]
4. a. Briefly compare and contrast the process of digestion in monogastric and ruminant stomachs. [12]
- b. Explain FOUR functions of the kidney. [4]
- c. Briefly explain how urine is produced. [4]
5. a. Label the diagram of the heart which follows: [10]



- b. Explain the flow of blood through the heart. [10]

**END OF TEST**