

SIR ARTHUR LEWIS COMMUNITY COLLEGE  
DIVISION OF AGRICULTURE  
END OF SEMESTER ONE EXAMS

**ASSOCIATE DEGREE IN GENERAL AGRICULTURE**

**ANIMAL SCIENCE- ASC 102**

# AL16



Thursday 16<sup>th</sup> December, 2010

9:00 am

Duration: 2 ½ hrs

**INSTRUCTIONS:**

This paper consists of two sections, sections A and B.

Section A consists of ONE COMPULSORY question. Section B consists of 4 questions, of which you must do ANY THREE.

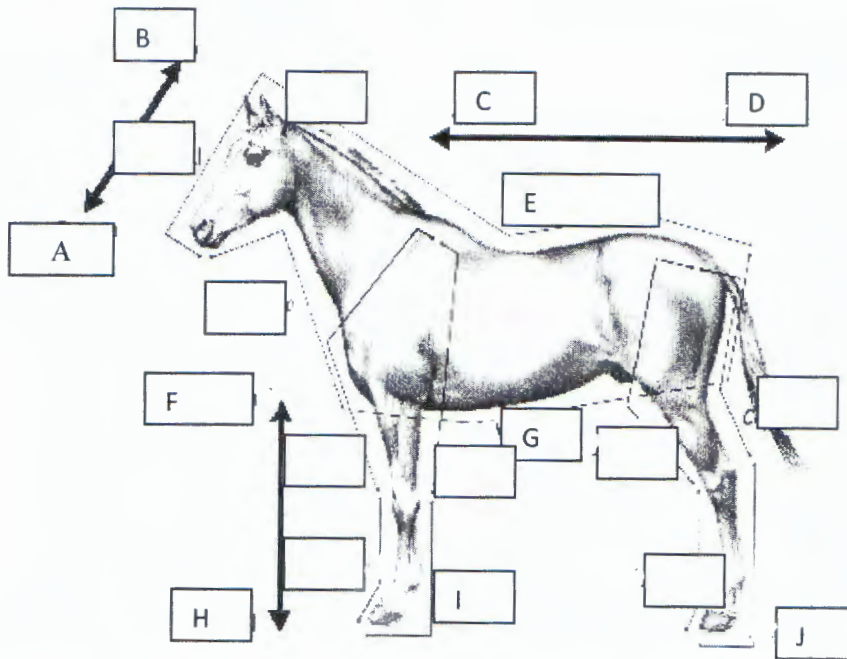
You are to answer the questions on the paper provided.

Answer each question on a separate sheet of paper.

## SECTION A

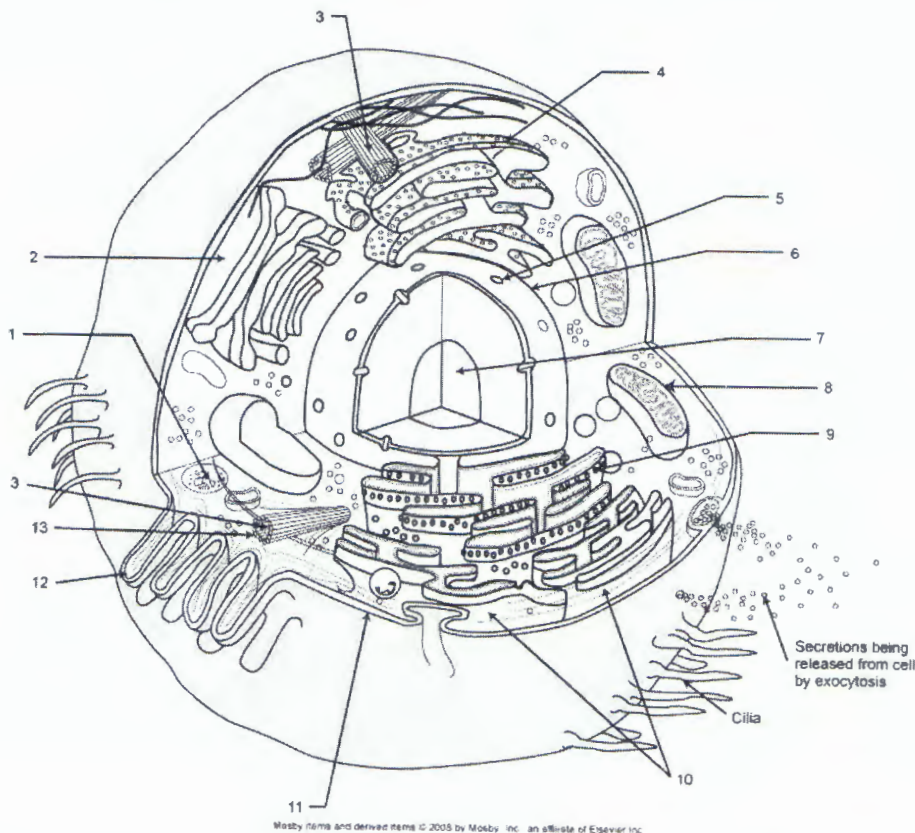
*This section consists of one (1) compulsory question worth 40 marks. Marks allocated to each part of a question are indicated in brackets at the end of each part.*

- 1) a) On the following diagram, letters A-J have been used to indicate some parts of an animal's body. Correctly identify the directional term that EACH letter (A-J) represents. (10mks)



- b) i) On the diagram which follows numbers have been used to indicate the parts of the cell. Correctly identify EACH part numbered 1-13. (13 mks)

- ii) State ONE function of EACH of the following parts: 2,4,6,8,10. (10 mks)



- b) iii) Epithelial tissue is one of four primary types of tissues. Name the other 3. (3 mks)
- iv) List FOUR functions of epithelial tissue. (4 mks)

## SECTION B

This section consists of **FOUR (4)** questions. You are to answer **ANY THREE**. Each question is worth a total of 20 marks, however marks allocated to each part of a question are indicated in brackets at the end of each part.

1. 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 marks)

HORMONE	GLAND WHERE PRODUCED	FUNCTION

(b) Differentiate between endocrine and exocrine glands. (2 marks)

2. Using **ANY FOUR (4)** of the following categories, compare the endocrine and nervous systems.

general function

reaction to stimuli

duration of effects

target tissues

chemical messenger

messenger producing cells (8 mks)

- ii) 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 mks)

3. Explain the process of digestion in a ruminant. (20 mks)

4. a. With the aid of diagrams, explain the cell cycle of a somatic cell. (15 mks)

- b. List TWO **active** membrane processes and ONE **passive** membrane process. (3 mks)

- c. Differentiate between the terms active and passive membrane processes. (2mk)

**END OF TEST**