



**SIR ARTHUR LEWIS COMMUNITY COLLEGE
DIVISION OF AGRICULTURE**



**Associate Degree Programme
End of Semester I Examination**

**Course: Animal Science – ASC511
Duration: 2 ½ hours**

Date: December, 2002

#A10

Answer Any Five (5) Questions. Each Question is worth 20 marks

1. (a) Outline the structure of an atom. (4 marks)
(b) State the steps of a scientific method. (6 marks).
(c) Describe the three states of matter. (10 marks)

2. (a) Distinguish between a permeable and a selectively permeable membrane. (4 marks)
(b) Explain how the cell membrane helps to maintain homeostasis. (6 marks)
(c) Discuss the process of Active Transport. (10 marks)

3. (a) Outline the stages of the cell cycle. (4 marks)
(b) Compare the phases of Mitosis. (6 marks)
(c) Describe Meiosis and explain its importance to variation within species. (10 marks)

4. (a) Define the term 'Growth'. (4 marks)
(b) Compare and contrast the methods of measuring Growth. (6 marks)
(c) Describe the concepts of Continuous and Discontinuous Growth. (10 marks)

5. (a) Trace the path of an ovum through the reproductive tract. (4 marks)
(b) Explain the functions of four hormones that influence the reproductive system. (6 marks)

- (c) Describe the Oestrus cycle. **(10 marks)**
6. (a) What is meant by the term Symmetry? **(4 marks)**
- (b) Outline the characteristics of phylum Porifera. **(6 marks)**
- (c) Discuss in what ways are the flat worms more complex than the sponges and coelenterates. **(10 marks)**
7. Write short notes on any five of the following: each short note is worth four (4) marks
- (a) Chiasmata
- (b) Phylum Mollusca
- (c) Coelom
- (d) pH
- (e) Corpus luteum
- (f) High reproductive performance
- (g) Epididymis
- (h) Turgor pressure

~~~~~End of Paper~~~~~