

VF DACTRI Past papers



SIR ARTHUR LEWIS COMMUNITY COLLEGE
DIVISION OF AGRICULTURE

1999/2000 ACADEMIC YEAR
CERTIFICATE PROGRAMME
END OF SEMESTER 1 EXAMINATION

ANIMAL STUDIES - ANS511

#A1



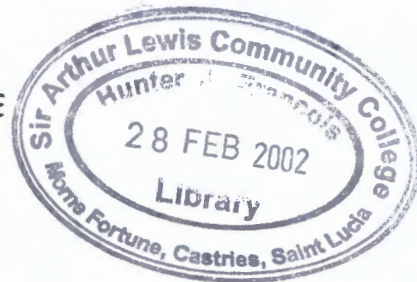
DECEMBER 1999

TIME: 2 HOURS

ANSWER ANY FOUR QUESTIONS.

1. (a) Outline the importance of Homeostasis. (10 marks)
(b) Explain the process of diffusion and Osmosis. (15 marks)
2. a) Discuss two methods of measuring growth. (10 marks)
b) With the aid of a diagram explain type of growth common to mammals. (15 marks)
3. a) Outline the stage of the cell cycle. (10 marks)
b) Discuss the mitotic process and indicate its importance to cells. (15 marks)
4. a) Discuss crossing over as it occurs in meiosis. (10 marks)
b) Explain the differences between Prophase I and Prophase II of Meiosis. (15 marks)
5. a) Explain the functions of the male and female reproductive organs. (10 marks)
b) Outline the process of development of an ovum from fertilization to parturition (15 marks)
6. Write short notes on any five of the following. (5 marks)
 - i) Scientific Methods (5 marks)
 - ii) Chemical nature of life (5 marks)
 - iii) Mixtures (5 marks)
 - iv) Turgor pressure or plasmolysis (5 marks)
 - v) Reduction division (5 marks)
 - vi) Oestrus cycle (5 marks)

SIR ATHUR LEWIS COMMUNITY COLLEGE
DIVISION OF AGRICULTURE
Certificate in Agriculture



Animal Studies - ANS511
Academic Year 2001/2002 End of Semester I Exam

2

Time: 2 ½ hours

Date: 10th December 2001

Answer any five (5) questions. Each question is worth 20 marks.

1. a) Define the term "Homeostasis". (4 marks)
- b) Compare and contrast the processes of Osmosis and Diffusion. (6 marks)
- c) Outline the active transport process and discuss its importance to living systems. (10 marks)

2. a) Define "Growth". (4 marks)
- b) Discuss two methods of measuring growth. (6 marks)
- c) Describe what is meant by the terms "Continuous" and "Discontinuous". (10 marks)

3. a) Name the stages of the cell cycle. (4 marks)
- b) Describe the phases of Mitosis. (8 marks)
- c) Explain the significance of Mitosis. (8 marks)

4. a) Define Meiosis. (5 marks)
- b) Compare and contrast Mitosis and Meiosis. (10 marks)
- c) Explain the importance of Meiosis in sexual reproduction. (5 marks)

5. a) Name two types of asexual reproduction. (10 marks)
- b) Discuss the process of chiasmata in reproduction. (3 marks)
- c) Explain the significance of synapsis in Meiosis I. (12 marks)

6. a) List the names of the structures, which make up the female reproduction system. (marks)
- b) Explain the function of the male reproductive system. (marks)
- c) Draw and label a diagram of the male reproductive system of a pig (marks)

7.
 - a) Outline the stages of the Oestrus cycle
 - b) Discuss the importance of high reproductive performance.
 - c) Explain the importance of the hormone testosterone.

8. Write short notes on any five of the following:-

- a) Homologous chromosomes
- b) Second meiotic division
- c) Passive transport
- d) Dry weight
- e) Genetic Stability
- f) Fission
- g) Semen production
- h) Vas deferens

DACTRI past papers

SIR ARTHUR LEWIS COMMUNITY COLLEGE
DIVISION OF AGRICULTURE

CERTIFICATE PROGRAMME
SUPPLEMENTAL EXAMINATION 2000

ANIMAL STUDIES - ANS511



JULY/AUGUST 2000

TIME: 2 HOURS

ANSWER ALL FOUR QUESTIONS.

1.
 - a) Define "Homeostasis".
 - b) Explain two methods of measuring growth.

2.
 - a) Outline the four stages of the cell cycle.
 - b) Explain the significance of Mitosis.

3.
 - a) Outline the stages of Meiosis.
 - b) Discuss the importance of Meiosis in reproduction.

4.
 - a) Define the passive transport.
 - b) Explain the relationship between Osmosis and diffusion.