

SIR ARTHUR LEWIS COMMUNITY COLLEGE

VF Agri Past Papers

DIVISION OF AGRICULTURE
END OF SEMESTER ONE EXAMS



ANIMAL SCIENCE- ASC 102

#A33

Duration: 2 ½ hrs

Tuesday, 8th December 2008

9:00 a.m.

INSTRUCTIONS:

This paper consists of 5 questions, of which you must do any four.

You are to answer the questions on the paper provided.

Answer each question on a separate sheet of paper.

1. (a) The following are only a few of the hormones produced in an animal's body; *Thyroxine, Insulin, Follicle stimulating hormone, Melatonin, Parathyroid hormone, Antidiuretic hormone, Growth hormone.*

For EACH of the hormones named above, state:

- i the glands in which they are produced,
 - ii their target cell,
 - iii ONE function. *(21 marks)*
- (b) Differentiate between endocrine and exocrine glands. *(2 marks)*
- (c) Give TWO (2) functions of the hypothalamus. *(2 marks)*
2. (a) Using the following categories, compare the endocrine and nervous systems.
- general function
 - reaction to stimuli
 - duration of effects
 - chemical messenger
 - messenger producing cells *(10 marks)*
- (b) Differentiate between the following pairs of terms;
- i. afferent and efferent nerves. *(2 marks)*
 - ii. autonomic and somatic nervous system. *(2 marks)*
 - iii. central and peripheral nervous system *(2 marks)*
 - iv. cranial and spinal nerves *(2 marks)*
- (c) What is the function of the cerebrum? *(2 marks)*
- (d) Explain the reflex arc. *(5 marks)*
3. (a) Give TWO (2) functions of the testes, and where in the organ does each take place? *(4 marks)*
- (b) What is important about the scrotum's ability to adjust the position of the testes relative to the body? *(1 mark)*
- (c) The stages of the oestrus cycle are closely linked with the events taking place in the ovarian cycle. Explain what is happening in the ovarian cycle during each stage of the oestrus cycle. *(20 marks)*
4. (a) Give FOUR (4) basic functions of the digestive tract. *(4 marks)*
- (b) The following diagrams illustrate the digestive systems of two classes of livestock.

DIAGRAM A

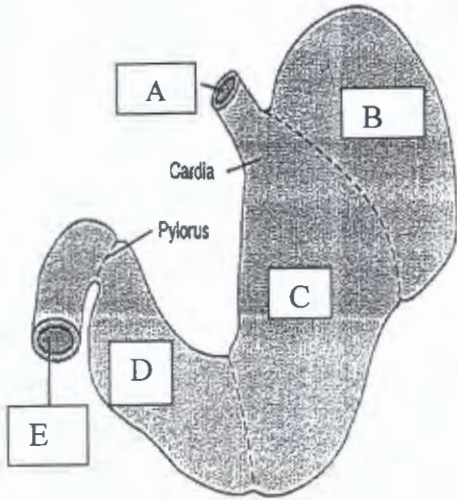
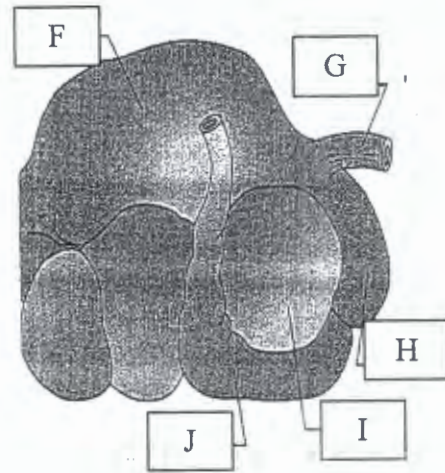


DIAGRAM B

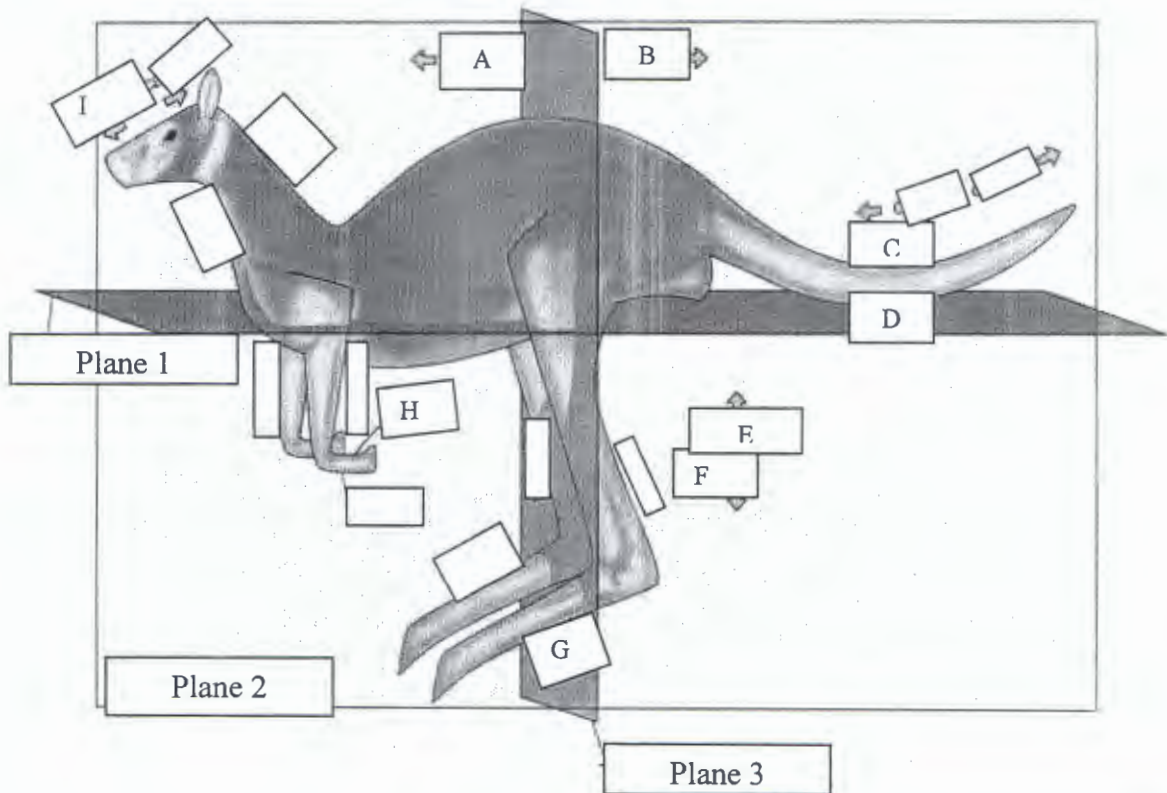


Give ONE example of an animal which has the digestive system illustrated in A and TWO examples of animals with the system illustrated in B. (3 marks)

(c) Name the parts labelled A-J. (10 marks)

(d) Explain how digestion takes place in the stomach of a goat. (8 marks)

5. (a) Membrane processes in the cell may either be active or passive.
- i. List TWO (2) active processes and THREE (3) passive processes. (5 marks)
 - ii. Explain how ANY ONE active and ONE passive process is carried out in the cell. (8 marks)
- (b) On the diagram which follows, letters have been used to indicate some parts of an animal's body. What anatomical terms are used to describe each of the parts labelled A-I? (9 marks)
- (c) What plane does EACH plane 1; plane 2 and plane 3 represent? (3 marks)



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END OF TEST

Animal Science Semester 1 2009/2010, December 8th 2009