



The Open University of Sri Lanka
Faculty of Engineering Technology
Diploma/Degree in Industrial Studies (Agriculture)
Final Examination- 2008/2009
AEI 4238 Agricultural Biology II

Date : 24-03-2007
Time : 1400-1700 hours

SECTION II

1.
 - a) Mention the characteristics of hormones.
 - b) Name two different parts of the pituitary gland?
 - c) Name the different hormones produce by each part mentioned above in 1 (b) of Pituitary gland and explain their functions.

2.
 - a) Name different parts of ruminant digestive system.
 - b) Explain the microbial fermentation of the rumen of animal digestive system.
 - c) Discuss the major factors that influence the age at which an animal reaches puberty.

3.
 - a) Give two examples of amino acid vitamin interactions in animal body.
 - b) Name essential macro minerals in animal diet and explain sources, functions and deficiency symptoms of four (04) of them.

4.
 - a) "A concentrate is usually described as a feed mixture, which supplies primary nutrients (protein, carbohydrate and fat), contains less than 18% crude fibre and usually low in moisture." What are the two different types of concentrates use in animal feeds?
 - b) Give examples for each of above concentrates mention in 4 (a).
 - c) Explain broadly, desirable characteristics of a ration to be maintain during formulation.

5.
 - a) Describe the actual "growth curve of an animal" plotted against the age.
 - b) "Nature of animal life is a product of environmental factors and hereditary factors. Potential for growth is modified by environmental factors. Environment can either stimulate or impair the growth and performance of farm animals." Discuss broadly the environmental factors that affect growth and development of farm animals.

6. Write short notes on any three (03) of following.
 - i) Fertilization and embryonic development in animals.
 - ii) Carbohydrate digestion in the rumen.
 - iii) Role of management systems used in livestock production farms to minimize disease incidences.
 - iv) Hypomagnesaemia of cows and ewes.