

The Open University of Sri Lanka Faculty of Engineering Technology

Diploma/Degree in Technology & Industrial Studies (Agriculture)

Final Examination-2009 / 2010

AEI 4238 Agricultural Biology II

Date

: 18 -03 - 2010

Time

: 0930-1230 hours

Duration

: Three (3) hours.

## SECTION II

1. a.) Explain the important parts of the ruminant digestive system.

b.) Describe the microbial fermentation in the ruminant digestive system.

- 2. a) Define the term "Puberty".
  - b.) Explain the factors affecting the puberty.
  - Describe the endocrine control of male reproductive system. c.)
- 3. Write short notes on any four (4) of the following topics.
  - Minerals are essential components in the animal diet.
  - ii. Factors affecting the feed intake of ruminants
  - iii. Amino acid requirements of monogastric nutrients.
  - iv. Problems associate with misappropriate amounts of amino acids in animal
  - v. Use of concentrates as animal feeds.
- 4. a) Briefly explain functions of carbohydrates in animal body.
  - b) Explain functions of water in animal body.
  - c) Describe sources of water to obtain by animal body.
- a) Discuss the role of different non nutritive feed additives.
  - b) Mention the feed evaluation methods and discuss two of them.
- a) Explain the influence of temperature on growth and development of animals.
  - b) Discuss different factors affecting animal health and steps to be taken to minimize diseases in animal production systems.