



The Open University of Sri Lanka
 Faculty of Engineering Technology
 Bachelor of Industrial Studies Programme

Final Examination- 2012/2013

AEI4238 Agricultural Biology II

Date : 08.08.2013
 Time : 09.30-12.30
 Duration : Three (03) hours

SECTION 2: Answer any four (04) questions.

1. (a) Define the term "ration".
 (b) Explain briefly five (05) desirable characters of a ration.
 (c) Formulate a 12 % CP diet using corn (8.8%) and a protein supplements (35 % CP), with 3 % rye (4.9 % CP) and 7.5 % milo (11.0 % CP). Calculate the ration using person's square method. CP stands for crude protein.
2. Water is essential for farm animals for growth and development. Critically discuss with the statement.
3. (a) What are anti nutritive factors?
 (b) Explain briefly the mechanism on which how these factors negatively affect on animals.
 (c) Briefly explain two (02) strategies to manage those anti nutritive factors in animal feed.
4. (a) What is Protein efficiency ratio?
 (b) Briefly explain main problems which are caused by the excess amount of single essential amino acid in the diet.
5. (a) Explain in details the digestion in the rumen.
 (b) How do you manipulate the diet to influence the rumen fermentation?
6. Write the short notes on following,
 - (a) Complex stomach of cow
 - (b) Embryonic development in farm animal
 - (c) Puberty