Uganda Martyrs University
Faculty of Agriculture

Final Examination 2017-2018
Bachelors of Science in Agriculture Year Three

Module: AG 11: Animal Health and Nutrition

Time: 09:30 am – 12:30 pm Date: Monday 16th July, 2018

Instructions:

- *Attempt **FOUR** questions only choosing any **TWO** questions from section A and any **TWO** questions from section B*
- *All questions carry equal 25 marks.*
- *Do not write anything on the question paper*

SECTION A (ANIMAL HEALTH)

Question 1

In a bid to reduce mastitis at dairy farms in Uganda, proper diagnosis is an important step.

(i) State and explain any 3 tests of identifying mastitis in cattle (9 marks)

(ii) How would you identify clinically infected and sub-clinically infected cattle (8 marks)

(iii) Explain how you will be able to control and prevent mastitis in these herds (8 marks)

Question 2

(a) Explain what you understand by the term "triad of disease causation" (10 marks).

(b) With relevant examples of diseases, explain how climate has influenced the temporal and spatial distribution of livestock diseases (15 marks)

Question 3

Farming in tsetse fly infested areas is a challenge to most farmers that calls for concerted efforts from different stakeholders towards tsetse fly reduction.

(a) Describe the major diseases transmitted by tsetse flies in cattle (11 marks)

(b) Explain the various methods used for the control of tsetse flies and the disease mentioned in (a) above (14 marks)

Question 4

(a) In farming as a business, the control of ticks and tick borne diseases requires judicious use of different control measures. Discus the validity of this statement using relevant examples (15 marks).

(b) Using any two tick species and their tick borne infections, explain what you understand by transstadial and transovarial transmission of tick-borne infections in cattle (10 marks).

SECTION B (ANIMAL NUTRITION)

Question 5

(i) Define a ration as applied in animal nutrition (2 marks)

(ii) State the various principles governing livestock ration formulation (8 marks)

(iii) As a livestock feed manufacturer, describe any five ways of carrying out quality control in poultry feeds (8 marks).

(iv) Proteins form the most expensive part of cattle ration. List any 5 legumes that can be used as protein sources in cattle production (7 marks)

Question 6

(i) What do you understand by the term premix, as applied to poultry feeds (5marks)

(ii) State the various principles governing livestock ration formulation (7marks)

(iii) As a livestock feed manufacturer, describe any five ways of carrying out quality control in poultry feeds (8marks).

(ii) List four methods of ration formulation (5marks)

Question 7

(a) Briefly explain the following concepts (6 marks)

(i) Creep feed

(ii) Grower ration

(iii) Sow and weaner meal

(b) State any four breeds of pigs kept in Uganda, and for each breed, state the features that can be used in its identification (10 marks)

(c) A pig farmer has approached you for advice on how she should feed her sow that delivered 10 piglets a week ago:

(i) What is the name given to the commercial feed that you would recommend her to use. (1 mark)

(ii) How much of that feed should she give to the sow and its 10 piglets per day before the piglets are separated from it. (3 marks)

Question 8

(a) What do you understand by the following (8 marks)

(i) Dry matter intake

(ii) Digestibility of a feed

(b) What do you understand by feeding standards (2 marks)

(c) In a tabular form, state the metabolizable energy and protein requirements for broiler chicken at various developmental stages (chicks, growers and finishers) (8 marks)

(c) Explain why feeding standards sometimes fail to meet all the nutritional requirement of animals (7 marks)