

UGANDA MARTYRS UNIVERSITY
FACULTY OF AGRICULTURE

Examinations 2013-2014
Bachelor of Science in Agriculture Year 3

Exam: Animal Health and Nutrition

Time: 10:00am – 01:00pm (3 Hrs)

Date: 04th July 2014

Instructions:

- i. Attempt 5 questions at least 2 from each section
- ii. Write clearly, number the questions appropriately on the answer booklet
- iii. Read and understand the instructions on the last page of the answer booklet
- iv. Do not write anything on a question paper

Section 1 Animal Health

1a. Explain explicitly five factors to take into account when designing animal health intervention in different production systems of animal husbandry in Uganda (10 marks)

b) Describe animal health management in the following production systems in Uganda:

- i. Ranching (5 marks)
- ii. Large scale commercial dairying (5 marks)

2a. Discuss two major ways through which animals NATURALLY defend themselves against disease infections (10 marks)

b) Name two types of relative resistance of animals against disease infections (2 marks)

c) List five ways of passive resistance of animals against diseases (5 marks)

d) What do you understand by interferon system of defence against infection in animals? (3 marks)

3a. Vector born diseases of livestock are some diseases that are most difficult to eradicate due to vector-pathogen relationship. What is a pathogen? (3 marks)

b) Discuss two ways of pathogen vector relationship in livestock (10 marks)

c) Explain 4 ways through which pathogens are transmitted from vectors to susceptible animals (8 marks)

4a. What is tick borne diseases? (2 marks)

b) Name three important tick born diseases in ruminants (3 marks)

c) List five factors that are contributing to tick resistance against acaricides in Uganda according to NARO (National Livestock Resources Resource Institute). (5marks).

d) Discuss the principle of infection and treatment method (ITM) system of immunization against East Coast Fever (10 marks)

Section 2 Animal nutrition

1a. Carbohydrates are the main source of energy for dairy cattle. Name three categories of carbohydrates (3 marks)

b) List three methods of analysis of fibre content of a feed. (6 marks)

c) Discuss three categories of forage protein based on degradation in the rumen of ruminant animals (9 marks)

d) Name two classifications of vitamins. (2 marks)

2a. Distinguish + hay and silage (4 marks)

b) Why is hay making rarely practised in Uganda? (6 marks)

c) Discuss the process of making good quality silage (10 marks)

3a. What is hydroponics fodder system (5 marks)

b) List 5 benefits of hydroponics fodder system in dairy farming (5 marks)

c) List 5 benefits of hydroponics fodder system in pig farming (5 marks)

d) Briefly explain the factors that influence the amount of feed a chicken will consume? (5 marks)

4a. Name two types of feeds fed to commercial broiler poultry from day one till the end of fattening period (day 1- week 7-8) (4 marks)

b) Discuss 4 ways how pig farmers can improve pig feed efficiency (8 marks)

c) Explain the functions of the reticulo-rumen part of the digestive system of a dairy cow