

S.3 Agriculture Assignment

Section A (10 Marks)

Attempt all questions in this section

1. **Which of the following is not a component of a balanced diet for zero grazed animals**
 - A. Roughages
 - B. Proteins
 - C. Carbohydrates
 - D. Exercises
2. **..... Is the sum of all nutrients in a feed that can be digested.**
 - A. Digestibility
 - B. Total digestible nutrients
 - C. Digestible crude protein
 - D. Biological efficiency
3. **The following pairs of feedstuff are purely protein except?**
 - A. Legumes, fish meal, earthworm meal.
 - B. Fish meal, legumes, maize bran.
 - C. Fish meal, earthworm meal, meat meal.
 - D. Legumes, earthworm meal, cotton seed cake.
4. **Which of the following is not a fat soluble vitamin?**
 - A. Vitamin A
 - B. Vitamin K
 - C. Vitamin D
 - D. Vitamin B2
5. **The main distinguishing characteristic of roughages is that they.....**
 - A. Contain moisture
 - B. Contain high energy
 - C. Contain fibers
 - D. Contain vitamins
6. **Which of the following is a deficiency of calcium in the body of lactating animals?**
 - A. Bloat
 - B. Ketosis
 - C. Milk fever
 - D. Anaemia
7. **In which part of the ruminant digestive system does separation of rough materials from the food occur?**
 - A. Omasum
 - B. Rumen
 - C. Reticulum
 - D. Omasum

8. **The enzyme that breaks down proteins to amino acids is?**
 - A. Maltase
 - B. Proteinase
 - C. Peptidase
 - D. Amylase
9. **Saliva in the mouth maintains an alkaline pH because of presence of.....**
 - A. Salts
 - B. Acids
 - C. Enzymes
 - D. Fluids
10. **Which of the following farm animals is capable of utilizing urea into proteins?**
 - A. Pigs
 - B. Sheep
 - C. Hens
 - D. Fish

Section B (30 marks); short answers

Attempt all questions.

1. Define digestibility of a feed? (02 marks)
2. State three measures undertaken by a farmer to improve feed digestibility (03 marks)
3. Give four uses of water in the body of a farm animal (04 marks)
4. Describe the anti-ricket triangle in animal nutrition (03 marks)
5. Identify three different types of feeds feed to farm animals (03 marks)
6. Mention five feed additives mixed in animal feeds on the farm (05 marks)
7. State three causes of bloat in farm animals (03 marks)
8. Differentiate between a production ration and a maintenance ration (02 marks)
9. Describe the three stages of swallowing food in a ruminant animal (03 marks)
10. Outline the functions of saliva in the mouth of an animal (02 marks)

Section C (60 marks); Essay questions.

Attempt any three questions in this section.

1. a) Explain the factors that influence the level of water intake in farm animals (16 marks)
b) Outline measures taken by the farmer to increase water intake in animals (04 marks)
2. What are the sources, uses and deficiency symptoms of the following nutrients in the body of farm animals?
 - a) Proteins
 - b) Carbohydrates
 - c) Minerals
3. A farmer would like to mix a ration of 16% protein using the following ingredients. Maize 8%CP, Maize bran 15%CP, cotton seed cake 40% CP and fish meal of 60% CP.
 - a) In what proportion would he mix these feed stuffs to make a ration of maize and maize bran are to be mixed with the ratio of 3:1 and cotton seed cake and fish meal in the ratio 1:2 respectively. (14 marks)
 - b) Calculate the quantity of each ingredient he would need to make a ration of 600Kg for his pigs. (06 marks)
4. a) Outline the differences between digestion in ruminants and in non-ruminants (06 marks)
b) Describe the structure of the digestive system of a non-ruminant animal (14 marks)
5. Explain the factors that affect the utilization of feeds rations by animals (20 marks)

End