

THE NATIONAL UNIVERSITY OF LESOTHO
FACULTY OF AGRICULTURE
B.SC. AGRIC ANIMAL SCIENCE (ANIMAL SCIENCE)
ANS 2503: FEEDS & FEEDING
FIRST SEMESTER FINAL EXAMINATION

JANUARY 2024

MARKS: 100

TIME: 3 HOURS

Instructions: Answer All Questions

Question 1

Write the following acronyms in full:

CF	APF	
EE	ANF	
TDN	PUFAs	
NPN	NCFRs	
NFE	EAAAs	(10)

Question 2

Differentiate between the following:

- Balance ration and Complete ration
- Essential and Non-essential amino acids
- Saturated and Unsaturated lipids
- Crude protein and Digestible crude protein
- Nutrient and Nutrition (10)

Question 3

- Discuss how nutrition plays an important role in animal production and health. (4)
- Discuss roughage types on the basis of nutrient density. (6)

Question 4

- A farmer wants to determine if a certain feedstuff can be included in formulating a ration for his broilers due to its fibre content. Outline the steps you would follow in order to analyse the crude fibre of the feedstuff. (9)
- Dried brewer's grain when analysed contained 23.2% CP on as fed basis and 11.9% moisture. Calculate % CP on DM basis. (8)

Question 5

What are the functions of lipids/fats in animal nutrition? (8)

Question 6

Write short notes on the nutritional value of the following:

- Maize
- Oats
- Clovers (12)

Question 7

Mention one native grass in Lesotho and briefly discuss its nutritive value. (10)

Question 8

Feeding of farm animals can be done in different ways. Discuss 5 common feeding practices.

(15)

Question 9

Explain how anti-nutritional factors affect utilization of nutrients and give one example for each.

(8)