

**THE NATIONAL UNIVERSITY OF LESOTHO**

**FACULTY OF AGRICULTURE**

**DEPARTMENT OF ANIMAL SCIENCE**

**ANS4501: SMALL RUMINANT PRODUCTION**

**FIRST SEMESTER FINAL EXAMINATION**

**JANUARY 2024**

**Marks: 100**

**Time 3 hours**

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**Instruction: *Answer All Questions***

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### **Question one**

The Ministry of Agriculture requested you to prepare a document that is meant to advise and convince dairy cow farmers to leave dairy farming and resort to small stock production: clearly discuss important points to be covered in the document. (10 marks)

### **Question two**

Reproduction is an important component in livestock farming, because it determines the growth and the profitability of the farm: list and discuss any **FIVE** factors affecting reproduction in small stock.

(10 marks)

### **Question three**

List and explain any **FIVE** measures of reproductive performance commonly used in small stock. (10 marks)

### **Question four**

Selection is one of the fundamental steps in genetic improvement in any livestock farming:

- a) Discuss four important sources of information (**selection tools**) that can assist small stock farmers to make well informed selection. (8 marks)
- b) Among the four selection tools which one is the best for selection? (2 marks)
- c) Discuss parameters to consider when selecting breeding ewes. (10 marks)

### **Question five**

Hoof care is one of the fundamental management practices in small stock:

- a) List and discuss three main causes of hoof growth. (6 marks)
- b) Discuss important considerations when trimming hooves. (4 marks)

### **Question six**

Discuss the significance of feeding ewes in the following stages of production:

- a) Breeding (5 marks)
- b) Lactating (5 marks)

### **Question seven**

Discuss the important nutritional facts every farmer needs to be aware of in order to increase productivity (10 marks)

### **Question eight**

Urinary calculi/kidney stones is one of the common nutrition related disorders in small ruminants, clearly discuss this problem with more emphasis on the following:

- a) Causes of the condition (4 marks)
- b) Which animals are at higher risk? (2 marks)
- c) Signs and Symptoms (2 marks)
- d) Control (2 marks)

### **Question nine**

Internal parasites infestation in small stock is a big challenge among farming communities:

- a) Why is it difficult to control internal parasites (2 marks)
- b) Discuss how do parasites cause disease (8 marks)