

THE NATIONAL UNIVERSITY OF LESOTHO

FACULTY OF AGRICULTURE

DEPARTMENT OF ANIMAL SCIENCE

**B.Sc. AGRICULTURE (ANIMAL SCIENCE) SUPPLEMENTARY
EXAMINATION**

ANS 4509: LARGE RUMINANT PRODUCTION

AUGUST 2023

MARKS: 100

TIME: 3 Hours

Instruction: Answer All Questions in SECTION A and SECTION B.

SECTION A; BEEF PRODUCTION

Question 1

- a) Outline six features that beef cattle should possess. [6]
- b) Briefly discuss the five performance traits that should be considered in selection of a breed. [10]
- c) From your knowledge of beef production, enumerate what would you say are the main constraints to beef production in Lesotho and explain three of the constraints. [9]

Question 2

- a) Explain five routine management practices critical in beef cattle production. [10]
- b) Discuss the major classes used for quality grading of steer and heifer carcasses. [10]
- c) Clearly indicate how muscle contraction affects the quality of meat in beef production. [5]

SECTION B; DAIRY PRODUCTION

Question 1

- a) What are the five factors to be considered when selecting a dairy animal? [5]
- b) Black quarter is a bacterial disease caused by *Clostridium chauvoei* and affects cattle. Explain the salient clinical signs for its diagnosis and its prevention. [5]
- c) What are the management strategies for transition cows? [5]

Question 2

Discuss management of calves under the following headings; [15]

- i) Care at calving
- ii) Feeding colostrum
- iii) Common disease problems

Question 3

- a) With the aid of a graph discuss the lactation curve/milk production in dairy cows.

[20]

END!!!