THE NATIONAL UNIVERSITY OF LESOTHO

FACULTY OF AGRICULTURE

DEPARTMENT OF ANIMAL SCIENCE

B.Sc. AGRICULTURE (ANIMAL SCIENCE) EXAMINATION

ANS 4509: LARGE RUMINANT PRODUCTION

JUNE 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 a 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 factors considered 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 chauvoel* 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!!!