

CHUKA UNIVERSITY
RESIT/ SPECIAL EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR
OF AGRICULTURAL EDUCATION AND EXTENSION AND BSc. AGRICULTURE

ANSC 450: RUMINANT PRODUCTION

INSTRUCTIONS: Answer **all** questions in **Section A** and any **two** in **Section B**

Section A (30 marks)

1.
 - a) Narrate some incidences that indicate farmers have a special attachment to their cattle (2 marks)
 - b) Demonstrate how entrepreneurship (expertise) is key in realization of the economic importance of ruminant production (2 marks)
 - c) Advise on traits farmers target during selection of a breeding stock for improved herd performance (2 marks).
 - d) Narrate how famers can distinguish between the following breeds of sheep
 - i) Merino and Corriedale (2 Marks)
 - ii) Red Masai and Small East Africa (2 marks)
2.
 - a) What is puberty age in a life cycle of goats and its importance (2 marks)
 - b) Explain a procedure commonly used by farmers to wean their lambs (2 marks)
 - c) With an example, distinguish between *Bos Taurus* and *Bos indicus* as categorized in beef cattle by Animal breeders (2 marks)
 - d) With a reason, which production system would you recommend for dairy farmers neighboring Chuka Town (2 marks)
 - e) Why is it crucial for dairy farmers to ensure that newborn calves suckle colostrum within the first 24 hours? (2 marks)
3.
 - a) Describe a deep-bedded shed as one of the structures commonly used in dairy farms (2 marks)
 - b) What reasons make pastoralists in Kenya prefer Somali camel breed to other breeds (2 marks)
 - c) How do pastoralists identify a rutting camel bull (2 marks)
 - d) Enumerate benefits farmers get on using sheep/goat handling facilities (2 marks)
 - e) How would you explain to a livestock farmer the differences between open and closed castration (2 marks)

Section B (40 marks)

4.
 - a) As a Ruminant production expert, discuss how you can assist
 - i) Pastoralists in Kajiado County fetch good market prices for their livestock products (10 marks)
 - ii) Zero grazing (stall feeding) dairy Farmers in Tharaka Nithi County to minimize competition (conflict) between crops and fodder production (10 marks)
5.
 - a) Discuss effects of natural breeding program in beef cattle in Kenya (10 marks)
 - b) As a dairy cattle expert, recommend suitable dairy cattle breeds for farmers in Tharaka Nithi County and discuss the reasons for your recommendations (10 marks)
6.
 - a) How would assist a farmer to diagnose whether his herd of camels is suffering from any kind of disease (10 marks)
 - b) As a Director in the State Department of Livestock Production, discuss issues you would consider in the promotion of camel production in North Eastern Kenya (10 marks)

