MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

AUGUST SESSION EXAMINATION FOR

BACHELOR OF EDUCATION

ANS 301: RUMINANT ANIMAL PRODUCTION

DATE: SCHOOL BASED   TIME:

INSTRUCTIONS;

ANSWER QUESTION ONE IN SECTION A AND ANY TWO QUESTIONS IN SECTION B

QUESTION ONE (30 MARKS)

a)   Distinguish between

    i.   Fore gut and hind gut fermenters   (2 marks)

    ii.   Ruminants and pseudo ruminants   (2 marks)

b)   Explain **FOUR** roles of ruminants in the Kenyan economy   (4 marks)

c)   Explain the importance of the following routine management practices in ruminant animal husbandry

    i.   Deworming.   (2 marks)

    ii.   Identification   (2 marks)

d)   Explain **FOUR** advantages of machine milking   (4 marks)

e)   Explain **TWO** disadvantages of housing goats in bomas   (4 marks)

f)   Distinguish between the processes of flushing and steaming in the management of ruminants

    (4 marks)

g)   Explain **FOUR** characteristics of a good breeding buck   (4 marks)

h)   Explain **TWO** reasons why it is important that the new born calf takes colostrum within the first 24 hours of its life   (2 marks)

SECTION B. Answer any TWO questions in this section

QUESTION TWO (20 MARKS)

a)   Explain **FIVE** reasons every dairy farmer must learn and implement clean milk production principles   (10 marks)

b)   A farmer wants to improve on his dairy herd performance. Explain **FIVE** ways artificial insemination can help him achieve this.   (10 marks)

QUESTION THREE (20 MARKS)

a)   Explain **FIVE** requirements of small ruminants housing   (10 marks)

b)   Farmers in Semi-arid Tana River County having been experiencing challenges within the nomadic pastoral production systems. Explain **FIVE** advantages of ranching over nomadic pastoral production system   (10 marks)

QUESTION FOUR (20 MARKS)

a)   Describe **FIVE** features that imply that a sheep is in the poorest body condition   (10 marks)

b)   Explain **FIVE** management aspects to be considered when handling pregnant does (10 marks)

QUESTION FIVE (20 MARKS)

a)   Describe **FIVE** constraints facing ruminant animal production in Kenya   (10 marks)

b)   Describe **FIVE** practices that should be carried out in the management of draught animals   (10 marks)