



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

DIPLOMA IN AGRICULTURAL EDUCATION AND EXTENSION

ANS 0301: RUMINANT ANIMAL PRODUCTION

DATE: 30/11/2020

TIME: 8.30-10.30 AM

INSTRUCTIONS:

Answer Question ONE and ANY other Two Questions

QUESTION ONE (30 MARKS)

- a) Describe **TWO** characteristics that distinguish milk breeds from beef breeds in cattle. (4 marks)
- b) Explain **THREE** reasons why goats would do better than sheep in bushy environments (4 marks)
- c) Distinguish between ruminant and non-ruminant livestock (2 marks)
- d) Explain **FIVE** pre cautions to carry out when hand milking dairy cows (5 marks)
- e) Explain **FIVE** reasons why ruminant livestock are important in the economy of Kenya (5 marks)
- f) Distinguish between the processes of flushing and steaming in the management of ruminants (4 marks)
- g) Distinguish between the terms fertility and prolificacy. (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 for promoting goat and sheep production in the tropics (10 marks)
- b) i Describe why and how the following ruminant management practices are done
- I. Removal of extra teats (3 marks)
 - II. Castration (3 marks)
- ii Explain how the above (i) ruminant management practices are done (4 marks)

QUESTION THREE (20 MARKS)

- a) Explain **FIVE** advantages of slatted raised floor housing for small ruminants (10 marks)
- b) Explain **FIVE** adaptation strategies to climate change in ruminant animal production. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Explain **FIVE** factors to be considered when preparing a buck for the breeding season (10 marks)
- b) Explain **FIVE** reasons for culling in a flock of sheep (10 marks)

QUESTION FIVE (20 MARKS)

- a) Explain **FIVE** important practices that need to be carried out before calving in cattle (10 marks)
- b) Describe **FIVE** practices that should be carried out in the management of draught animals (10 marks)