



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

THIRD YEAR FIRST SEMESTER EXAMINATION FOR DIPLOMA IN
AGRICULTURE EDUCATION AND EXTENSION

KAP 0305: RUMINANT ANIMAL PRODUCTION

Date: 9/12/2016

Time: 8:30 – 10:30 AM

INSTRUCTIONS:

Answer Question One And Two Other Questions

SECTION A: 30 MARKS

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain **FOUR** disadvantages of keeping Friesian cattle in the tropics. (4 marks)
- b) Explain **TWO** advantages of crossing *Bos indicus* and *Bos taurus* cattle breeds in the tropics. (4 marks)
- c) Compare the feeding preferences of goats and sheep. (2 marks)
- d) Explain why the Red Maasai sheep are recommended to pastoralist and smallholder farmers. (6 marks)
- e) Explain **TWO** factors that limit the use of fresh blood as feed for livestock. (4 marks)
- f) Distinguish between **fertility** and **prolificacy** in shoats. (2 marks)

- g) Explain **FOUR** factors that should be considered when constructing houses for goats. (4 marks)
- h) Explain how you can determine the age of shoats using their teeth. (4 marks)

SECTION B: ANSWER ANY OTHER TWO QUESTIONS (40 MARKS)

QUESTION TWO (20 MARKS)

- a) Explain **FOUR** methods of classifying tropical goat breeds. (12 marks)
- b) Explain the environmental adaptations of the Galla goat to Semi- arid regions of Kenya. (8 marks)

QUESTION THREE (MARKS)

- a) Explain **TWO** calf management practices. (10 marks)
- b) Outline the steps to be followed in hygienic hand milking of cattle. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Explain **FOUR** disease control measures for sheep production in humid regions. (4 marks)
- b) Explain **FOUR** breeding methods that can be used in sheep production. (16 marks)

QUESTION FIVE (20 MARKS)

- a) Explain **FIVE** reasons for promoting goat and sheep production in the tropics. (5 marks)
- b) Explain **FIVE** effects of climate change on dairy and beef cattle and their adaptation strategies. (15 marks)