



MACHAKOS UNIVERSITY

University Examinations for 2017/2018 Academic Year

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SUPPLEMENTARY/SPECIAL

SECOND SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE IN AGRICULTURE EDUCATION AND EXTENSION

ANS 301: RUMINANT ANIMAL PRODUCTION

Date:

Time:

Instructions **QUESTION ONE** and any two questions in section B

QUESTION ONE

- a) Explain **TWO** occasions where paint is used to identify animals (**4mks**)
- b) Explain the advantages of full hand milking (**4mks**)
- c) Explain **TWO** advantages of crossing *Bos indicus* and *Bos taurus* cattle breeds in the tropics (**4mks**)
- d) Explain **FOUR** reasons for housing livestock (**4mks**)
- e) Explain the terminology 'fertility' (**2mks**)
- f) Explain the importance of the following.
 - i. Body condition (**2mks**)
 - ii. Dehorning (**2mks**)
- g) Distinguish between in breeding and line breeding (**4mks**)
- h) Describe **FOUR** management activities that should be done on kidding (**4mks**)

SECTION B. Answer any TWO questions in this section

QUESTION TWO

- a) Explain **FIVE** advantages of mating heifers using Artificial insemination **(10mks)**
- b) Describe 5 characteristics for a breeding doe **(10mks)**

QUESTION THREE

- a) The teeth of an animal will determine its productivity and longevity of service to the farmer. Describe how the age of sheep can be determined using its teeth **(10mks)**
- b) Explain **FIVE** advantages of partitioning a sheep house **(10mks)**

QUESTION FOUR

- a) Describe **FIVE** factors that hinder Kenya from fully benefiting from animal ruminant livestock **(10mks)**
- b) Describe **FIVE** pre-mating activities that should be carried out in bucks **(10mks)**

QUESTION FIVE

- a) Describe **FIVE** practices to be considered when weaning lambs **(10mks)**
- b) Explain **FIVE** roles of camels in the pastoralist economy **(10mks)**