



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EXTENSION AND EDUCATION

FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN
AGRICULTURAL EDUCATION AND EDUCATION

KRM 301: RUMINANT ANIMAL PRODUCTION

Date:

Time:

INSTRUCTIONS:

Answer Question One And Two Other Questions

SECTION A: (COMPULSORY) 30 MARKS

QUESTION ONE:

- a) Explain the following terms: (3 marks)
- i) Flushing
 - ii) Steaming
 - iii) Total mixed ration (TMR)
- b) Explain FOUR importances of animal housing (4 marks)
- c) Explain FIVE signs of a cow on heat (5 marks)
- d) Explain THREE bad traits of a milking cow (3 marks)
- e) Explain the following management operations in ruminant animal production. (4 marks)

- i) Castration
- ii) Ear notching
- f) Explain the techniques used in determining age and body weight of a ruminant animal (4 marks)
- g) Explain any two mating systems in ruminant animals (4 marks)
- h) Explain three factors that affect performance of draught animals. (3 marks)

SECTION B: 40 MARKS: ANSWER ANY OTHER TWO QUESTIONS

QUESTION TWO

Describe calf management under the following headings: (20 marks)

- i) Feeding from 0 weeks to weaning
- ii) Digestive system development
- iii) Diseases affecting calves
- iv) Routine practices

QUESTION THREE

Describe the artificial insemination procedure on a cattle (20 marks)

QUESTION FOUR

- a) Describe FIVE uses of keeping farm records in relation to ruminant production. (10 marks)
- b) Discuss FIVE factors that can optimize the success of embryo transfer technique in cattles. (10 marks)

QUESTION FIVE

- a) Discuss the care of a pregnant ewe up to lambing (10 marks)
- b) Describe the milking procedure of a dairy cattle (10 marks)