



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN AGRIBUSINESS MANAGEMENT AND TRADE AND EDUCATION (SCIENCE)

KRM 203: PRINCIPLES OF ANIMAL PRODUCTION

DATE: THURSDAY 29TH MARCH 2012

TIME: 11.00 A.M. – 1.00 P.M.

INSTRUCTIONS: Answer question **one** and any other **three** questions.

1. a) Differentiate the following terms as used in animal production: (10 marks)
 - i) Animal husbandry and Animal Production
 - ii) Feedstuff and Nutrient
 - iii) Population genetics and Quantitative genetics
 - iv) Rumination and Ruminal fermentation
 - v) Resistance and Immunity
- b) Explain briefly why intensive livestock production systems have become popular in the modern world. (7 marks)
- c) Explain the challenges facing the agricultural sector as outlined in the Kenya Vision 2030. (8 marks)
2. a) Explain why tissues of ruminants may contain branched chain fatty acids. (2 marks)
- b) Explain the importance of studying animal nutrition. (3 marks)
- c) Explain the factors which affect absorption of inorganic elements in animal nutrition. (5 marks)
- d) Give five nutritional differences between ruminant and non-ruminant animals. (5 marks)
3. a) Describe the production parameters used for examination of animal health. (5 marks)
- b) Give the categories of disease causing agents in animals. (5 marks)
- c) Describe the factors which determine development of disease in an animal. (5 marks)

4. a) Discuss any three mating systems in animal breeding. (6 marks)
- b) Define the term genotype and show how it is related to animal performance. (2 marks)
- c) Explain how the environment affects animal performance. (2 marks)
- d) Explain five traits of economic importance in animal breeding. (5 marks)
5. a) Explain the term capacitation? (1 mark)
- b) Explain the role of pituitary gonadotropins in the process of spermatogenesis. (4 marks)
- c) Give the various forms of physiological infertility in male animals. (5 marks)
- d) Give the functions of the hormones progesterone and prostaglandins. (5 marks)
