



EMBU UNIVERSITY COLLEGE

(A Constituent College of the University of Nairobi)

2015/2016 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

**SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE (RANGE MANAGEMENT) AND BACHELOR OF SCIENCE IN
AGRICULTURAL EDUCATION AND EXTENSION**

AAS 202: ANIMAL GENETIC RESOURCES

DATE: APRIL 13, 2016

TIME: 02:00-04:00

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions

QUESTION ONE

- a) Discuss the contribution of livestock sector to the national economic output. (5 Marks)
 - b) Define animal biodiversity. (2 Marks)
 - c) Explain how the urge to increase the efficiency of productivity performance of some livestock species affects the biodiversity. (5 Marks)
 - d) Explain the following terms. (4 Marks)
 - i) Genetic diversity
 - ii) Animal genetic resources
 - iii) Breed at risk
 - iv) Indigenous species
 - e) Discuss the important role played by animal genetic diversity in environmental sustainability. (4 Marks)
 - f) What would you understand of the following terms as used in descriptive measure of genetic parameters? (4 Marks)
 - i) Heritability
 - i) Repeatability
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- ii) Phenotypic correlation
- iii) Genetic correlation
- g) What are some of the physical characteristics used to characterize animal genetic resources? (2 Marks)
- h) Explain the effect of climate change on animal genetic diversity. (4 Marks)

QUESTION TWO

- a) Discuss the methods of characterization of animal genetic resources. (10 Marks)
- b) Discuss the challenges associated with animal gene bank. (10 Marks)

QUESTION THREE

Elaborate on the major threat to animal genetic diversity in Kenya. (20 Marks)

QUESTION FOUR

Discuss conservation of farm animal genetic resources and state the advantages of the conservation methods. (20 Marks)

QUESTION FIVE

Explain some of the national and international legal frame works that influence the management of the animal genetic resources. (20 Marks)

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