



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

INSTITUTIONAL BASED PROGRAMME (IBP)

EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION

KAP 204: ANIMAL NUTRITION AND FEEDS

DATE: Wednesday, 28th April, 2010

TIME: 8.00 a.m.- 10.00 a.m.

INSTRUCTIONS:

Answer question **ONE** and any other **THREE** questions.

1. a) Differentiate the following terminologies:
 - i) Nutrition and Nutrients (2 marks)
 - ii) Dietary essential nutrient and Dietary non-essential nutrient. (2 marks)
 - iii) Digestion and Metabolism. (2 marks)
 - iv) Digestible protein and Metabolizable protein. (2 marks)
 - v) Fibrous proteins and Globular proteins (2 marks)
- b) Differentiate between neutral detergent fibre, acid detergent fibre and lignin in animal feed analysis. (6 marks)
- c) What is feed dry matter and why is it important to measure the dry matter of feeds? (4 marks)
- d) Give five differences in the nutrition of pigs and poultry. (5 marks)
2. a) State any five nutrients in animal nutrition. (5 marks)
- b) Give two functions of the nutrients named in (a) above (10 marks)
3. Discuss digestion in ruminants under the following headings:
 - a) Rumination

- b) Reticulo-Rumen
- c) Omasum
- d) Abomasum
- e) Small intestine
- f) Large intestine

(15 marks)

4. With suitable examples, discuss the role of sight, smell and mouth in the nutrition of domestic animals. (15 marks)

5. Describe the various classes of animal feedstuffs. (15 marks)