



(Knowledge for Development)

KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**THIRD YEAR 1ST SEMESTER
SPECIAL / SUPPLEMENTARY EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE AND
BIOTECHNOLOGY; B.SC. AGRICULTURE EDUCATION AND
EXTENSION; AGRICULTURAL ECONOMICS AND RESOURCE
MANAGEMENT; AND B.ED. SCIENCE**

COURSE CODE: AAP 311
COURSE TITLE: ANIMAL NUTRITION

DATE: 16TH AUGUST 2023 **TIME:** 11 – 1 PM

INSTRUCTIONS TO CANDIDATES

There are a total of five (5) Questions.
Answer Question 1 and any other two (2) Questions.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



Q1. COMPULSORY QUESTION (30 MARKS)

- a) Distinguish between digestion and metabolism. (4 marks)
- b). Outline any four (4) functions of water in animal nutrition. (4 marks)
- c) List the contents of gastric juice and their functions. (5 marks)
- d) Suppose we require a diet which contains 15% digestible crude protein (DCP). Using **Pearson Square** method, show how much maize (DCP=9%) and fish meal (40% DCP) will be required to make 70 kg of the diet. (3 marks)
- e) A farmer in your area of jurisdiction has a Friesian cow which weighs 350 kg and produces 15 kg milk per day. Estimate the daily cost of feeding the dairy cow on fresh napier grass containing 68% moisture, given that the farmer pays ksh 6 per kg of fresh napier. (10 marks)
- f) Explain the importance of adding antibiotics to animal feeds. (4 marks)

ANSWER ANY 2 QUESTIONS

- Q2. Discuss factors affecting feed intake in monogastric animals. (20 marks)
 - Q3. a) Describe the effects of anti-nutritive factors found in feeds (10 marks)
b) Describe any five (5) food additives. (10 marks)
 - Q4. Discuss SIX (6) **factors** affecting digestibility of foodstuffs. (20 marks)
 - Q5. Describe in details the Indicator Method of Forage Analysis. (20 marks)
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