

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE  
OF BACHELOR OF SCIENCE (ANIMAL SCIENCE)

ANSC 333: ANIMAL NUTRITION AND LIVESTOCK FEEDING

STREAMS: BSC (AGED, AGRI & FOST)

TIME: 2 HOURS

DAY/DATE: TUESDAY 05/12/2017

11.30 A.M. – 1.30 P.M.

---

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND ANY TWO IN SECTION B

SECTION A (30 MARKS)

1.
  - (a) Describe animal nutrition. [2 marks]
  - (b) Define a balance diet. [2 marks]
  - (c) List feedstuffs rich in potassium [2 marks]
  - (d) Highlight importance of Cu and Co in animal bodies [2 marks]
  - (e) List compounds constituting NPN [2 marks]
  
2.
  - (a) List carbohydrates categories and one feed rich in each. [2 marks]
  - (b) List Ether extracts composition in a feedstuff. [2 marks]
  - (c) List groups of non-ruminants herbivores and give an example. [2 marks]
  - (d) Highlight food preference models in ruminants. [2 marks]
  - (e) Highlight potential of maize as fodder. [2 marks]
  
3.
  - (a) Outline potential of molasses in livestock feeding. [2 marks]
  - (b) Highlight type of livestock fit for fat/oil feeding. [2 marks]
  - (c) Highlight benefits of stall or shed feeding. [2 marks]
  - (d) Describe gross energy. [2 marks]
  - (e) Highlight a feed additive and give an example [2 marks]

**SECTION B (40 MARKS)**

4. (a) Write short notes on the following grasses species in Kenya. [10 marks]  
(i) Napier grass or elephant grass (*Pennisetumpurpureum*)  
(ii) Rhodes grass (*Chlorisgayana*)  
(b) Write short notes on two leguminous forage species in Kenya. [10 marks]
5. (a) Describe various animal (based) origin protein sources used in farm animals feeding. [10 marks]  
(b) Discuss factors influencing feeding standards and feed formulation in farm animals. [10 marks]
6. (a) Write short notes on cereal by-products used in livestock feeding. [10 marks]  
(b) Describe protein based anti-nutritional agents as relates to feed utilization in livestock. [10 marks]
-