

CHUKA



UNIVERSITY

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EXAMINATION FOR THE AWARD OF DIPLOMA IN ANIMAL HEALTH AND PRODUCTION

ANSC 0233: ANIMAL NUTRITION AND LIVESTOCK FEEDING

STREAMS: DIP. ANHE

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 07/8/2019

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS: Answer ALL questions in section A and any TWO section B

SECTION A (40 MARKS)

1. (a) Describe substance emitting from decomposing animal matter according to Claude berthollet [2 marks]
- (b) Describe relationship between the rate of metabolism with carbon dioxide gas according to Antoine Lavoisier [2 marks]
- (c) Highlight Magendies experiment on a single food (feed) on sustaining animal life [2 marks]
- (d) Describe food chain, and give an example [4 marks]
2. (a) Highlight classes of carbohydrates [2 marks]
- (b) Highlight class of farm animals with high protein requirements [2 marks]
- (c) Describe non-essential amino acids and give an example [2 marks]
- (d) Highlight attributes of animal based proteins [2 marks]
- (e) Describe functions of lipids in animal bodies [2 marks]
3. (a) Describe vitamins [2 marks]
- (b) Highlight groups or classes of vitamins [2 marks]
- (c) Describe classifications of minerals [2 marks]

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- (d) Highlight functions of a domestic animal stomach [2 marks]
- (e) Describe rumen requirements needed by microorganism in breaking down fibre [2 marks]

marks]

**SECTION B (30 MARKS)**

4. (a) Explain the importance of proper feeding of farm animals [10 marks]
- (b) Discuss factors influencing domestic animal feed intake [10 marks]
5. Discuss factors influencing feed utilization in farm animals [10 marks]
- (b) Explain reasons leading under-nutrition in farm animals [10 marks]
6. (a) Write short notes on diseases resulting from metabolic disorders [10 marks]
- (b) Describe chemical composition of feeds. [10 marks]
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