

CHUKA



UNIVERSITY

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**EXAMINATION FOR THE AWARD OF
DIPLOMA IN ANIMAL HEALTH AND PRODUCTION**

ANSC 0250: LIVESTOCK PRODUCTION – RUMINANT

STREAMS: DIP (ANHE) Y2S2

TIME: 2 HOURS

DAY/DATE: TUESDAY 10/12/2019

8.30 AM – 10.30 AM

INSTRUCTIONS:

- Answer ALL Questions in Section A and any Two in Section B
- Do not write on the question paper
- Use illustrations where necessary

SECTION A – 30 MARKS

Question One

- (a) Give one demerit of the Jersey breed of cattle. [1 mark]
- (b) Describe the following ruminant breeds in terms of origin, colour and purpose. [9 marks]
- (i) Charolais
 - (ii) Toggenburg
 - (iii) Ayrshire
 - (iv) Corriedale
 - (v) Sahiwal
 - (vi) Galla

Question Two

- (a) Briefly explain any five factors affecting growth and development in ruminants. [5 marks]
- (b) List any five signs of heat in does. [5 marks]

Question Three

- (a) Would you consider providing protein ad libitum in ruminant diet? Give reasons for your answer. [3 marks]
- (b) Outline the characteristics of ruminant agriculture. [4 marks]
- (c) Define flushing in relation to sheep production and explain its importance. [3 marks]

SECTION B (40 MARKS)

Question Four

- (a) Discuss the direct and indirect contribution of ruminant livestock to livelihoods in Kenya. [10 marks]
- (b) Beef farming in Kenya plays a major role to the economy even though they are faced with numerous challenges, discuss those challenges giving possible solutions. [10 marks]

Question Five

- (a) Suppose you are formulating a total mixed ration for feedlot fattening of beef cattle. Which sources of energy and protein would you consider? [10 marks]
- (b) You have been employed as a farm manager in commercial dairy farm and your first task is to evaluate the feeding regime of the dairy animals. Discuss the concept of feeding in dairy cows during drying period and lactation period. [10 marks]

Question Six

- (a) Assume you have been hired as an extension agent by a local NGO to advice dairy cattle breeding. Explain economic important traits you will advise the farmers to consider when selecting breeding stock. [12 marks]
 - (b) Culling is a management practices which involves removal of unproductive animals from the herd. Discuss criteria for culling in ruminant animals. [8 marks]
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