

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

ANHE 0114: ANIMAL PHYSIOLOGY

STREAMS: DIP (ANHE)

TIME: 2 HOURS

DAY/DATE: TUESDAY 10/12/2019

11.30 AM – 1.30 PM

INSTRUCTIONS:

Answer ALL Questions in Section A and any 2 in Section B

SECTION A (30 MARKS)

1. (a) Define “animal physiology” [2 marks]
- (b) Briefly differentiate the functions of the 3 types of muscle tissues. [3 marks]
- (c) Describe the feedback mechanisms in the body. [3 marks]
- (d) Differentiate cold-blooded from warm-blooded animals. [2 marks]
2. (a) List and briefly explain 4 main hemostatic mechanisms in the body. [4 marks]
- (b) Outline the constituents of plasma. [4 marks]
- (c) List 2 hormones secreted by the anterior pituitary glands giving the functions of each in the body. [2 marks]
3. (a) Outline the digestive processes that take place in the mouth of an animal. [4 marks]
- (b) List 4 anticoagulants commonly used in animal health. [4 marks]

- (c) List the functions of the lymphatic system. [2 marks]

SECTION B (40 MARKS)

4. (a) Trace the movement of air from inspiration to expiration. [15 marks]

- (b) Explain the occurrence of oedema and the eventual resolution. [5 marks]

5. (a) Birds and pigs are both monogastric animals. Explain other similarities and differences in their digestive system. [8 marks]

- (b) Explain the different methods which domestic animals use for prehension / ingestion. [5 marks]

- (c) Explain the mechanism of bone growth using long bones as the point of reference. [4 marks]

- (d) Explain the autonomic nervous system differentiating its two parts. [3 marks]

6. (a) Explain the regulation of urine volume and concentration in the body. [6 marks]

- (b) Briefly explain how ejaculation occurs in dogs. [4 marks]

- (c) Explain the parturition processes (giving birth) in cattle. [5 marks]

- (d) With the aid of a diagram, explain what is binocular vision and give its advantage in animals. [5 marks]
-