



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2020/2021

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

(ANIMAL HEALTH MANAGEMENT)

KAS 104: ANIMAL PHYSIOLOGY

DATE: WEDNESDAY 17TH MARCH 2021

TIME: 8.00 A.M - 10.00 A.M

INSTRUCTIONS:

Answer **ALL** questions in Section A and any **TWO** questions in Section B. Within a Section **ALL** questions carry equal marks. Illustrate your answers with diagrams and give examples where appropriate.

Section A Answer all the Questions in this Section (40 Marks)

1. a) Explain the following terms:
 - i) Action potential (3 marks)
 - ii) Isotonic solution (2 marks)
2. List five functions of the skin. (5 marks)
3. Explain the mechanisms that control respiration in mammals. (5 marks)
4. Differentiate the following:
 - i) Active transport and carrier mediated transport (2.5 marks)
 - ii) Secretion and Excretion (2.5 marks)
5. Describe the cardiac cycle. (5 marks)
6. Describe the movement of food along the digestive system. (5 marks)
7. Explain why blood is an important transport system in the animal body. (5 marks)
8. Describe the mechanism that controls location in farm animals. (5 marks)

Section B: Answer any Two Questions (30 marks)

9. Describe the physiology of the urinary system of a mammal. (15 marks)
10. Discuss briefly the following processes in mammals.
 - a) Homeostasis (5 marks)
 - b) Respiration (5 marks)
 - c) Thermoregulation (5 marks)
11. Discuss the functions of the central nervous system of a mammal. (15 marks)