

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2018/2019**

**THIRD YEAR SECOND SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN PUBLIC HEALTH**

**IPH 2107: COMPARATIVE ANATOMY & PHYSIOLOGY OF FOOD ANIMALS II**

**DATE: OCTOBER, 2019 TIME: 2 HOURS**

INSTRUCTIONS

**SECTION A: ANSWER ALL THE QUESTIONS: 48 MARKS**

1. i. Outline three functions of the mammalian skeleton. (3 marks)

 ii. Outline six key reasons for studying comparative anatomy.

(3 marks)

2. Using a well labeled diagram, outline main features of a bovine femur. (6 marks)

3. i. State four functions of the mammalian skin. (4 marks)

ii. For each of the following name one important distinguishing feature:-

 a. Thoracic vertebrae. (1 mark)

 b. Lumbar vertebrae. (1 mark)

4. Name the photosensitive receptor cells of the retina of the eye.

(6 marks)

5. Outline the main features of synovial joint. (6 marks)

6. i. Name any 2 bones of *os coxae*. (1 mark)

 ii. Name the tarsal bones according to their rows. (5 marks)

7. Name two parts of the mammalian skull and describe each part briefly indicating their position and functions. (6 marks)

8. Outline the components of the vascular layer of the eyeball. (6 marks)

**SECTION B: ANSWER ONE QUESTION ONLY: 22 MARKS**

9. i. Discuss the components and functions of inner part of the ear. (10 marks)

ii. Discuss the components and functions of the gastrointestinal tract. (12 marks)

10. i. Describe the endocrinal functions of the following:-

 a. Hypothalamus

 b. Pituitary gland

11. i Describe the dermis layer of the mammalian skin. (12 marks)

 ii. Outline the bones of bovine forelimb. (10 marks)