JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

PUBLIC HEALTH/COMMUNITY HEALTH AND DEVELOPMENT

SPECIAL EXAMINATIONS NOV. 2020

COURSE CODE: **HPD 3214**

COURSE TITLE: **Anatomy and Physiology of Food Animals**

EXAM VENUE: **STREAM: BSc Public/ Comm. Health & Dev**

DATE: **EXAM SESSION:** **TIME: 2.00 HOURS**

Instructions:

1. **Answer all the questions in Section A and 2 questions in Section B.**
2. **Candidates are advised not to write on the question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

1. Differentiate between the terms "Anatomy" and "Physiology". (3 marks)

2. Describe the structure and function of the following:
    a. Cell membrane (1 mark)
    b. Endoplasmic reticulum (1 mark)

3. Describe the structure and function of the following:

    a. Ribosome (1 mark)
    b. Nucleolus (1 mark)
    c. Mitochondrion (1 mark)

4. Name the basic body tissues (3 marks)

5.   Describe the structure and function of one basic body tissue (4 marks)

6.   List and explain three examples of how structure determines function in the body. (3 Marks)

7.   Define the term Homeostasis (3 marks)

8.   Name four types of bones (4 marks)

9.   Name three types of hormones (3 marks)

10. Name two types of blood vessels (2 marks)

SECTION B.   ANSWER ANY TWO QUESTIONS

Question 11: Compare and contrast the digestion in ruminants with that in mono-gastric animals [20 marks]

 Question 12:
    a. What are the phases of reproductive development in the life of a mammal? [10 marks]
    b. How do you determine the mammal's readiness for breeding? [10 marks]

 Question 3
    a. List the sources and function of hormones derived from steroid, peptides and amines[10 marks]
    b. Describe the cell theory [10 marks]

Question 4: What are the functions of the major female reproductive organs in poultry? [20 marks]