



**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**

**1<sup>ST</sup> YEAR 1<sup>ST</sup> SEMESTER 2024/2025 ACADEMIC YEAR**

**MAIN/KISUMU CAMPUS**

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**COURSE CODE:**

**HCB 1105**

**COURSE TITLE:**

**INTRODUCTION TO HUMAN**

**ANATOMY AND PHYSIOLOGY**

**EXAM VENUE: LAB 6**

**STREAM: BSc Public/ Comm. Hlth & Dev**

**DATE: 16/1/25**

**EXAM SESSION: 9-11.00 AM**

**TIME: 2.00 HOURS**

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**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.**

**SECTION A: 20 Marks**

NB: Indicate whether the statement is TRUE or FALSE. (Each question carries 1 mark).

1. Anatomy is concerned with the functions of various parts of the body.
2. The pulmonary artery carries deoxygenated blood.
3. Lymph vessels have valves within them.
4. Donkeys are not classified as food animals in Kenya.
5. Systematic anatomy is concerned with the study of anatomy by regions of the body.
6. Paccinian corpuscles detect temperature.
7. You do not always need a microscope to study anatomy.
8. Arteries are blood vessels that carry blood away from the heart.
9. There is a relationship between animal anatomy and physiology.
10. Cells are the smallest functional units of animals.
11. Animal cells have a cell wall.
12. Donkeys do regurgitate their food.
13. Ribosomes are present in all parts of the cytoplasm.
14. Blood is a tissue.
15. Autonomic nerves are also located within the central nervous system.
16. The adrenal cortex produces noradrenaline.
17. Chickens have a four chambered stomach.
18. Leydig cells produce oestrogens.
19. The cerebellum is the biggest portion of the brain.
20. The liver has a role in digestion.

**SECTION B: Attempt all questions in this section. (30 Marks)**

1. Describe the structure and function of the stomach in a cow and explain its role in the digestion of plant material (15 marks).
2. Describe the function of three accessory digestive organs in a pig (15 marks).

**SECTION C: Answer two (2) questions. (20 Marks)**

1. Discuss the structure and function of the reproductive system in chickens (10 marks).
2. List TEN animals gazetted as food animals in Kenya (10 marks).
3. Describe the structure and function of the mammalian heart. (10 marks).