



JARAMOGI OGINGA ODINGA UNIVESITY OF SCIENCE AND TECHNOLOGY SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR CERTIFICATE IN COMMUNITY HEALTH AND
DEVELOPMENT
1ST YEAR 1ST SEMESTER 2024/2025 ACADEMIC YEAR
MAIN CAMPUS

COURSE CODE: HCD 111

COURSE TITLE: INTRODUCTION TO HUMAN ANATOMY AND PHYSIOLOGY

EXAM VENUE:

STREAM: (CERT Comm Health & Dev)

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and Any two question in Section B**
 - 2. Candidates are advised not to write on question paper**
 - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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SECTION "A" (30MARKS) ANSWER ALL QUESTIONS

1. Differentiate between histology and cytology (2 Marks)
2. The human body is made up of various systems that work interdependently to ensure well-being of an individual. Define the following terms
 - a) Pathology (2 Marks)
 - b) Prognosis (2 Marks)
3. Salivary glands release their secretions into ducts that lead to the mouth. Enumerate TWO main types of salivary glands. (2 Marks)
4. Pigments of the skin provides the skin with its color. Identify TWO pigments of the skin. (2 Marks)
5. The cell is the major part of all living organisms, it carries out different functions. Highlight FOUR functions of the cell. (4 Marks)
6. The endocrine system is made up of glands that make hormones which carry information and instructions from one set of cells to another. State FOUR hormones found in the posterior/anterior lobe of pituitary gland. (4 Marks)
7. For an individual to remain alive, the circulatory system must keep on functioning. In case of any abnormality, the circulatory system develops different diseases and conditions. This therefore slows down the functioning of the circulatory system. Outline FOUR conditions and diseases of the circulatory system. (4 Marks)
8. The human body is made up of various systems that work interdependently to ensure well-being of an individual. Mention FOUR human body systems. (4 Marks)
9. Blood clotting normally occurs when there is damage to blood vessel. Explain the blood clotting process. (4 Marks)

SECTION B (40 MARKS)

ANSWER ANY TWO QUESTIONS (EACH 20 MARKS)

1. Blood circulatory system delivers nutrients and oxygen to all cells in the body. It consists of the heart and blood vessels running through the entire body.
 - a) With an aid of a diagram illustrate the structure of the heart (10 Marks)
 - b) Discuss the blood circulation process. (4 Marks)
 - c) Identify THREE blood vessels and their functions. (6 Marks)
2. The lymphatic system begins with small vessels called the lymphatic capillaries which are in direct contact with interstitial fluid and surrounding tissue. The system collects and drains most of the fluid that is forced out of the blood stream and accumulates in the spaces between cells.
 - a) Mention FOUR components of the lymphatic system. (4 Marks)
 - b) Discuss FOUR functions of the spleen. (12 Marks)
 - c) Identify FOUR disorders of the lymphatic system. (4 Marks)

3. The urinary system comprises of various organs that work together to maintain proper renal functioning.
- a) Mention FOUR organs of the urinary system. (4 Marks)
 - b) Using a well labeled diagram, illustrate the nephron of the kidney. (10 Marks)
 - c) Describe any THREE functions of the urinary system. (6 Marks)
4. a) List and describe the functions of FOUR female reproductive organs and the hormones secreted from the female reproductive organs. (10 Marks)
- b) List and describe any FOUR male reproductive organs and the hormones secreted from the male reproductive organs. (10 Marks)
5. Name and discuss the 11 organ systems of the human body (20 Marks)