

102106T4COH

COMMUNITY HEALTH LEVEL 6

HE/OS/CH/CC/04/6/A

APPLY HUMAN ANATOMY AND PHYSIOLOGY

July/August 2024



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE

1. This paper consists of two sections; **A** and **B**
2. Answer **ALL** the questions as guided in each section
3. Marks for each question are as indicated in the brackets
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in this question paper

This paper consists of THREE (3) printed pages

Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing

SECTION A: [40 MARKS]

Award marks for ALL questions in this section as indicated

1. Cell biology is the study of the structural and functional units of cells, Identify **THREE** main parts of the human cell. [3 Marks]
2. The human heart works like a pump, distributing blood around your body to keep you alive. Outline **FOUR** ways in which the heart is adapted to its function. [4 Marks]
3. Jane fell down the stairs and injured her articular knee cartilage. She had been on medication and care for weeks but the healing process of her knee is extremely slow. Outline **TWO** reasons contributing to the slow healing process of her articular knee cartilage. [2 Marks]
4. Blood is a loose connective tissue connecting different organs within the human body. Outline **FOUR** components of blood. [4 Marks]
5. The kidneys are the primary organs of the urinary system. State **FOUR** functions of the human kidneys. [4 Marks]
6. Homeostasis is the existence and maintenance of a relatively constant environment within the body. Differentiate between negative homeostasis and positive homeostasis [4 Marks]
7. Communicable diseases are diseases that can spread between people. Identify **FOUR** types of epidemic-prone diseases [4 Marks]
8. Alex, a member of your community fell from a tall tree injuring part of his axial skeleton. State **FOUR** axial skeletal bones that may have been affected. [4 Marks]
9. Non-communicable diseases contribute approximately more than 27% of all deaths in Kenya, regarding this, outline **FOUR** characteristics of non-communicable diseases. [4 Marks]
10. The muscular system is composed of specialized cells and muscle fibers. Outline **THREE** types of muscles of the human body. [3 Marks]
11. The digestive system is a network of organs that help you digest and absorb nutrition from your food. Highlight **FOUR** organs of the alimentary canal. [4 Marks]

SECTION B: [60 MARKS]

Answer any **THREE** questions in this section.

12. The integumentary system is a system that consists of skin, nails, hair and glands.
- a) The main pigment of the skin is melanin, which is distributed across melanocyte cells of the skin. Identify TWO skin pigmentation disorders. [2 Marks]
 - b) Explain FOUR functions of the human skin. [8 Marks]
 - c) Using a well-labeled diagram, illustrate the structure of the human skin. [10 Marks]
13. The nervous system serves as the body's command center, consisting of the brain, spinal cord, and nerves. It coordinates all body functions by transmitting electrical signals from the brain to all other parts of the body.
- a) Explain the TWO types of nerves. [4 Marks]
 - b) Nerves are composed of cells called neurons. Using a well-labeled diagram, illustrate the structure of the neuron. [6 Marks]
 - c) Explain the functions of FIVE parts of the human brain. [10 Marks]
14. Kenya has recognized diabetes as a major public health problem since. A national population survey showed that the prevalence of type 2 was higher than that of type 1 in most urban and rural areas.
- a) Differentiate between Type 1 diabetes and Type 2 diabetes [4 Marks]
 - b) During a routine household visit, you noticed that a household member was presenting symptoms of diabetes. Identify TWO symptoms you observed. [2 Marks]
 - c) Explain TWO preventative measures for type 2 diabetes. [4 Marks]
 - d) Describe FIVE causes of diabetes. [10 Marks]
15. The female reproductive system is made up of the internal and external sex organs that function in the reproduction of new offspring.
- a) Discuss the FOUR phases of the menstrual cycle. [12 Marks]
 - b) Explain FOUR adaptations of the female reproductive system. [8 Marks]

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