

102106T4COH

COMMUNITY HEALTH LEVEL 6

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

Apply Human Anatomy and Physiology

March/April 2025



**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** questions in section A and **ANY THREE** (3) questions in section B.
3. Marks for each question are indicated in the brackets.
4. Candidates are provided with a separate answer booklet
5. Do not write on the question paper.

This paper consists of FIVE (5) 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)

Answer ALL the questions in this section.

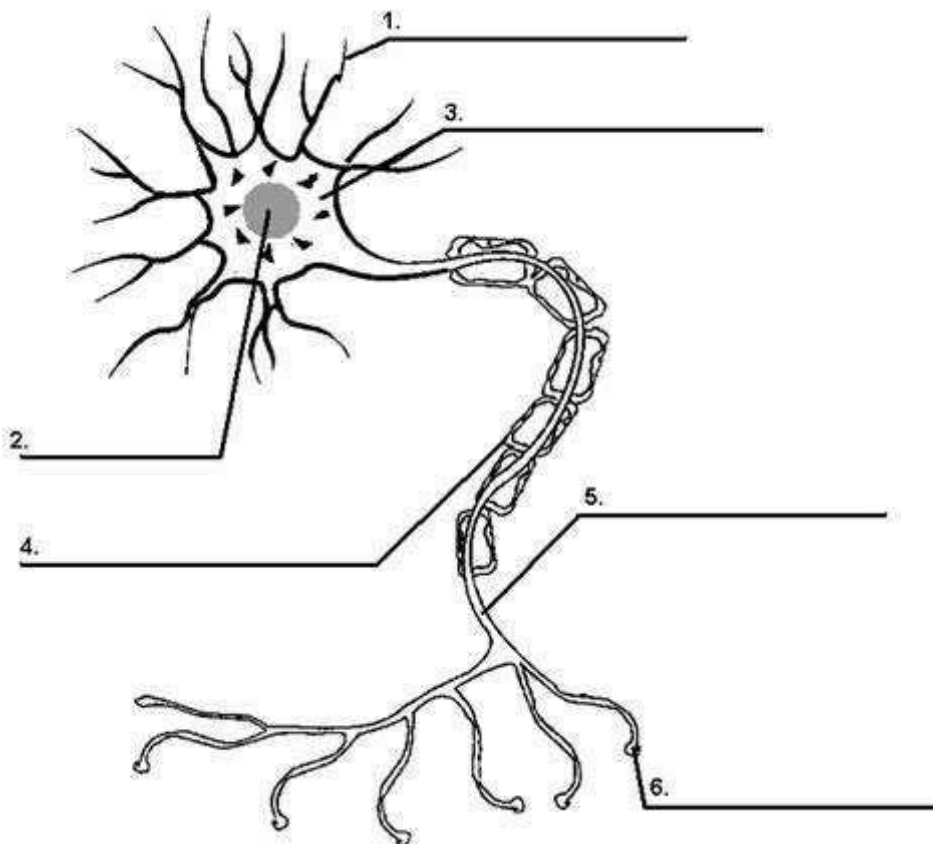
1. Communicable diseases are mostly transmitted through microorganisms that enter the human blood through the epithelial membranes. Identify THREE epithelial membranes that permit such transmission. [3 Marks]
2. Doe, who frequently visits the doctor, has been informed that his frequent visits are influenced by limited production of body cells responsible for strengthening his immunity. Enumerate THREE such cells. [3 Marks]
3. Tonsils intercept and destroy swallowed and inhaled antigens making them the first line of defense against oral and respiratory infections. Outline THREE tonsils in the human body. [3 Marks]
4. You fell from a tree and hit the ground with your cranium. State FOUR bones that were injured because of the impact of this fall. [4 Marks]
5. Strong bones are essential in preventing musculoskeletal diseases. Enumerate THREE musculoskeletal diseases affecting people in your community. [3 Marks]
6. Non-communicable diseases are becoming a rising threat in Kenya, increasing the burden of health services. As a Community Health Assistant, outline TWO preventive and control strategies of non-communicable diseases of the cardiovascular system you would recommend to the community. [2 Marks]
7. Giving an example in each, differentiate between positive feedback and negative feedback in homeostasis. [4 Marks]
8. Organs of the body are often sectioned into quadrants to reveal the underlying organs contained in each quadrant, for precise diagnosis and treatment of various organ diseases. Identify THREE organs located in the lower right quadrant of the abdomen. [3 Marks]
9. The urinary system is essential in maintaining homeostasis. Highlight THREE roles that the kidneys play in this. [3 Marks]
10. Adrenal glands are pyramid-shaped organs found in the abdominal cavity, producing a range of hormones. State THREE functions of the different hormones produced by the adrenal glands. [3 Marks]
11. The respiratory system is made up of several organs among them the nose. Outline FOUR respiratory functions of the nose. [4 Marks]

12. Staining of the human cell under the microscope helps in pathological identification for accurate diagnosis. Identify THREE parts of the human cell that can be identified through histological staining. [3 Marks]
13. Identification of skin conditions can easily be detected through physical examination by a doctor. Highlight TWO skin conditions affecting community members. [2 Marks]

SECTION B (60 MARKS)

Answer Any THREE Questions in This Section

14. The digestive system is critical in maintaining and sustaining the life process of the human body. It consists of the stomach, intestines and accessory organs.
- a) Describe FIVE functions of the stomach in the digestive system. [10 Marks]
 - b) Explain FIVE roles of accessory organs of the digestive system. [10 Marks]
15. The skin comprises three layers, the epidermis, dermis, and hypodermis, which have different significance in ensuring adaptation of the skin to its functions.
- a) Describe SIX adaptations of the dermis to fulfilling skin functions. [12 Marks]
 - b) Discuss FOUR glands found in the skin, stating functions of each gland. [8 Marks]
16. The nervous system receives information, integrates it and communicates electrical signals to the receptor organs and glands. Together with the endocrine system, it coordinates and controls vital aspects of body function and maintaining homeostasis.
- a) Label the following structure of the neuron. [6 Marks]



- b) Differentiate between sympathetic and parasympathetic divisions of the autonomic nervous system using SEVEN roles they play in maintaining homeostasis.

[14 Marks]

17. The male and female reproductive system is responsible for gamete production that ensures continuity of human species.

- a) Describe SEVEN adaptations of the male reproductive system to its function.

[14 Marks]

- b) Human Immunodeficiency Virus/Acute Immuno-Deficiency Virus (HIV/AIDS) discordant couples can reproduce without the risk of infecting the serous negative partner. Explain THREE strategies used by discordant couples to protect the serous negative partners.

[6 Marks]