

102106T4COH

COMMUNITY HEALTH LEVEL 6

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

Apply Human anatomy and physiology

Nov/Dec 2023



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

WRITTEN ASSESSMENT

Time: 3 HOURS

INSTRUCTION TO CANDIDATE

1. This paper has two sections **A** and **B**
2. You are provided with a separate answer booklet
3. Marks for each questions are as indicated
4. Do not write on the question paper

This paper consists of three (3) printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated.

SECTION A: (40 MARKS)

Answer ALL the questions in this section

1. Histological staining helps in the identification of various diseases. State TWO techniques/ methods used in histological staining. **(2 Marks)**
2. A neuron is a basic unit of the nervous system. Outline THREE morphological adaptations of the neuron that make it suitable for the transmission of nerve impulses. **(3 Marks)**
3. The human organism is categorized into different levels of structural and functional organization. Identify FOUR levels of this organization. **(4 Marks)**
4. The cell is the basic unit of life. Enumerate THREE elements of the cell theory. **(3 Marks)**
5. Connective tissues can either be classified as wandering or fixed. Highlight FOUR functions of connective tissues. **(4 Marks)**
6. Anne has complained of pain in the upper ventral cavity. Identify FOUR organs that might be attributing to this pain. **(4 Marks)**
7. The anterior pituitary gland plays a critical role in hormone production. State FOUR hormones of the anterior pituitary glands. **(4 Marks)**
8. There are three types of muscles, namely the skeletal, smooth and cardiac muscles. Outline FOUR differences between skeletal muscle and smooth muscles. **(4 Marks)**
9. The skin is the largest organ of the human body. State FOUR functions of the skin. **(4 Marks)**
10. The sperm is the human male gamete responsible for fertilizing the female gamete. Mention THREE adaptations of the male sperm to its function. **(3 Marks)**
11. Jerusha fell from a tree and injured her fore arm. Mention TWO bones that she might have injured. **(2 Marks)**
12. The respiratory system is responsible for gaseous exchange in the human body. Identify THREE non-communicable diseases of the respiratory system. **(3 Marks)**

SECTION B: (60 MARKS)

Answer any THREE questions in this section.

13. The urinary system comprises of the kidney, ureters, bladder and the urethra. This system is critical in the elimination of waste products from the body.
- a) Using a well labelled diagram, illustrate the nephron of the kidney, indicating the direction of the filtrate. **(10 Marks)**
 - b) Describe the FIVE functions of the urinary system. **(10 Marks)**
14. The digestive system consists of the digestive tract, a tube extending from the mouth to the anus, and its associated accessory organs.
- a) Discuss FIVE functions of the digestive system. **(10 Marks)**
 - b) Describe FIVE functions of the stomach. **(10 Marks)**
15. The heart is a strong muscle pump located in the thoracic cavity. It is a critical organ of the circulatory system.
- a) Describe FOUR functions of the heart in the human body. **(8 Marks)**
 - b) You are planning to give a talk to community members on diseases of the cardiovascular system. Describe THREE diseases you will talk about. **(6 Marks)**
 - c) Explain THREE ways of preventing development of cardiovascular diseases. **(6 Marks)**
16. The female reproductive system is responsible for production of female gametes, conception, pregnancy and childbirth.
- a) Using a well labeled diagram, illustrate the female reproductive system stating the function of each mentioned organ. **(12 Marks)**
 - b) You have been invited to Malindi girls' high school to give a talk to the students on female reproductive system. Assuming you will cover the menstrual cycle, critically describe this cycle. **(8 Marks)**

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