

091206T4PTT

PERIOPERATIVE THEATRE TECHNOLOGY LEVEL 6

HE/OS/TT/CC/01/6/A

Demonstrate Knowledge in Human Anatomy and Physiology

Nov/Dec. 2023



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

WRITTEN ASSESSMENT

Time: 3 Hours

INSTRUCTIONS TO CANDIDATE

1. The paper consists of **TWO** sections: A and B
2. Do not write on the question paper.
3. Marks for each question are indicated in the brackets
4. You are provided with a separate answer booklet.

This paper consists of 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)

*Answer **all** questions in this section*

1. Identify THREE types of tissues in the human body. (3 marks)
2. State TWO types of glial cells and explain their functions. (4 marks)
3. Explain FOUR functions of the human skeleton. (4 marks)
4. Differentiate between positive and negative feedback mechanism in homeostasis. (4 marks)
5. Highlight THREE functions of lymph nodes. (3 marks)
6. State THREE anatomical differences between arteries and veins (3 marks)
7. Outline the FIVE levels of the human body (5 marks)
8. Explain FOUR components of the lymphatic system. (4 Marks)
9. Identify THREE respiratory functions of the nose. (3 marks)
10. State TWO functions of the spleen. (2 marks)
11. The nervous system is the master controlling and communicating system of the body
 - a) State TWO characteristics of neurons. (2 marks)
 - b) List THREE elements of spinal reflexes. (3 marks)

SECTION B: (60 MARKS)

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

12. Blood is a vital fluid that circulates through the human body.
- a) Describe the composition of blood. (8 marks)
 - b) In addition to these cellular components, blood also contains various constituents. Discuss these blood constituents. (8 marks)
 - c) Explain the reasons why the blood groups AB and O are termed as universal recipient and universal donor respectively. (4 marks)
13. Digestion is a major activity in the human body. A patient reported that he took a carbohydrate meal for lunch.
- a) Identify ONE layer of the gastrointestinal system. (1 mark)
 - b) Explain the FIVE processes of digestion from the mouth to anus. (10 marks)
 - c) State the NINE abdominal regions, and give an example of any structure found in it. (9 marks)
14. The cell is considered as the basic unit of an organism.
- a) Draw a well-labelled diagram of a human cell. (6 marks)
 - b) Explain the functions of SEVEN organelles found in the human cell. (14 marks)
15. The kidney plays a critical role in the human body
- a) Draw a well-labelled cross-section diagram of the kidney. (6 marks)
 - b) State TWO functions of the kidney other than urine formation. (2 marks)
 - c) Describe the process of urine formation. (12 marks)

END