

091206T4PTT

PERIOPERATIVE THEATRE TECHNOLOGY LEVEL 6

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

Demonstrate Knowledge of Human Anatomy and Physiology

July/Aug 2023



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

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATE

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

This paper consist of 3 printed pages

**Candidate 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. Define the following terms as used in anatomy and physiology (5 marks)
 - a) Sagittal plane
 - b) Haemostasis
 - c) Medial
 - d) Chemical level
 - e) Meiosis
2. State THREE functions of the human body (3 marks)
3. State THREE characteristics of epithelial tissues (3 marks)
4. Explain the TWO main body cavities in the human body (4 marks)
5. Draw and label a diagram of the human cell (4 marks)
6. Identify TWO roles of the spleen (2 marks)
7. Name THREE functions of growth hormone in the human body (3 marks)
8. Draw and label a cross-sectional diagram of the kidney (5 marks)
9. Name FOUR functions of the pharynx (4 marks)
10. Identify the THREE distinct part of the ear. (3 marks)
11. Highlight FOUR functions of the reproductive system (4 marks)

SECTION B: (60 MARKS)

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

12. You are the theatre technician on duty and the surgeon asks you to place an x-ray film of a fractured femur bone on the image intensifier.
- a. Draw and label a diagram of the femur bone (4 marks)
 - b. Name TWO types of synovial joints (2 marks)
 - c. Name TWO types of muscles in the human body (2 marks)
 - d. Explain SIX functions of bones in the human body (12 marks)
13. The cardiovascular system circulates blood constantly around the body, allowing constant communication between tissues distant from each other.
- a) Draw and label a diagram of the heart showing blood flow through the chambers. (7 marks)
 - b) Explain FIVE components of blood plasma. (10 marks)
 - c) State THREE structural differences between arteries and veins. (3 marks)
14. The nervous system is the master controlling and communicating system of the body.
- a) Identify the TWO divisions of nervous system. (2 mark)
 - b) Describe the FIVE components of a reflex arc with the aid of an example. (10 marks)
 - c) Explain FOUR functions of the cerebellum (8 marks)
15. The digestive system has general structure that is modified at different levels to provide for the processes occurring at each level.
- a) Explain FOUR functions of the digestive system. (8 marks)
 - b) Describe SIX functions of the liver. (12 marks)