

**091906T4HRI**

**HEALTH RECORDS AND INFORMATION TECHNOLOGY LEVEL 6**

**HE/OS/HR/CR/01/6/A**

**Apply Medical Pathology**

**March/April 2025**



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

**WRITTEN ASSESSMENT**

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Date: 31.03.2025 10:35 AM

**Time: 3 HOURS**

**INSTRUCTIONS TO CANDIDATE**

1. Marks for each question are indicated in the brackets.
2. The paper consists of **TWO** sections: **A** and **B**.
3. Answer **ALL** the questions in section **A**, question **12** and **any other TWO** Questions in **Section B**
4. Candidates are provided with a separate answer booklet
5. **DO NOT** write on 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)**

*Answer ALL the questions in this section.*

1. The accurate use of terms in pathology is essential for understanding and diagnosing conditions. Given this importance, define the following terms as used in pathology:  
(4 Marks)
  - a) Disease
  - b) Apoptosis
  - c) Necrosis
  - d) Hyperplasia
2. Pathologists need to distinguish between the cause of a disease and how it develops to understand its nature. Differentiate between pathogenesis and etiology within this framework. (2 Marks)
3. Identifying the underlying causes of hypoxia is crucial for diagnosing and treating this condition. Considering pathological conditions, mention THREE causes of hypoxia. (3 Marks)
4. Ensuring safety while handling pathological specimens involves following specific precautions. Based on these safety protocols, state FOUR standard precautions when handling pathological specimens. (4 Marks)
5. Understanding the common causes of cell injury is vital in pathology for diagnosing and treating diseases. Considering this, enumerate THREE common causes of cell injury. (3 Marks)
6. Recognizing signs of clinical death is essential for medical practitioners in determining the end of life. Given this importance, mention THREE signs indicating clinical death. (3 Marks)
7. The natural history of a disease outlines its progression without medical intervention, which is key in understanding its course. Based on this concept, state FOUR different stages in the natural history of a disease. (4 Marks)
8. Pathologists employ various diagnostic techniques to accurately identify diseases. Considering their use in pathology, identify FOUR diagnostic techniques. (4 Marks)
9. Identifying risk factors for peptic ulcer disease is essential for prevention and treatment. Based on current knowledge, state FOUR risk factors of peptic ulcer disease. (4 Marks)
10. Symptoms and signs are distinct terms in pathology, each with specific meanings for patient assessment.
  - a. Based on this distinction, differentiate between a symptom and a sign. (4 Marks)

b. Considering the classification, state THREE symptoms of malaria. (3 Marks)

11. The immune system consists of various components crucial for defending against diseases. Given this, mention TWO components of the immune system. (2 Marks)

### SECTION B (60 MARKS)

#### *Answer question 12 (Compulsory) and any other TWO Questions in This Section*

12. As a health record officer in a health facility, you are required to keep record of patients' specimens before they are submitted to the pathologist for analysis.

a. Describe FIVE details that you must record before specimens are submitted. (10 Marks)

b. Explain FIVE reasons why pathological specimens are stored and retained. (10 Marks)

13. A 35-year-old construction worker presents to the clinic with a swollen, painful, and warm knee after a minor injury at work. The area is red, and the patient has a mild fever.

a) Describe the FIVE cardinal signs of acute inflammation observed in this patient's knee. (10 Marks)

b) Discuss FIVE beneficial effects of acute inflammation in the context of the patient's injury. (10 Marks)

14. Mr. X is the pathologist in charge at a busy urban hospital, where he diagnoses various diseases and ensures the proper handling of specimens.

a) Discuss the FIVE major diagnostic techniques Mr. X will use in his work as a pathologist at the urban hospital. (10 Marks)

b) Describe FIVE prevention and control measures that Mr. X and his colleagues should put in place when handling specimens to maintain safety and accuracy.

(10 Marks)

15. An elderly woman is diagnosed with osteoporosis after multiple fractures. Her doctor informs her about other bone disorders that could affect her.

a) Mention FIVE bone disorders that are commonly seen in pathology. (5 Marks)

b) Explain FIVE signs and FIVE symptoms of bone disorders or diseases, using osteoporosis as an example. (10 Marks)

c) State FIVE serious complications and permanent damages that could result from untreated bone disorders like osteoporosis. (5 Marks)