

091906T4HRI

HEALTH RECORDS AND INFORMATION TECHNOLOGY LEVEL 6

HE/OS/HR/CC/04/6/A

APPLY MEDICAL INSTRUMENTATION

NOV/ DEC 2023



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

WRITTEN ASSESSMENT

Time: 3 hours

INSTRUCTIONS TO CANDIDATES

1. This paper has two sections **A** and **B**.
2. You are provided with a separate answer booklet.
3. Marks for each question 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 pages are
printed as indicated and that no questions are missing**

SECTION A: (40 MARKS)

Answer ALL questions in this section.

1. Define the following terms as used in medical instrumentation (4 Marks)
 - a) Medical instrument
 - b) Medical diagnosis
2. Medical devices are categorized into classes. Explain the THREE classes of medical devices based on their risks (6 Marks)
3. Outline any FOUR medical equipment used to diagnose medical condition (4 Marks)
4. Using the knowledge acquired in Medical Instrumentation, define the term patient care equipment (2 Marks)
5. Every medical equipment should go through quality assurance documentation. State FOUR reasons why quality assurance documentation is important for medical equipment (4 Marks)
6. List FOUR examples of sample specimens that can be extracted from human for testing in the laboratory (4 Marks)
7. There are various reasons why doctor's notes are examined. State TWO reasons why doctor's notes are examined. (2 Marks)
8. Give any FOUR clinical results likely to be given by medical instrument to determine diagnosis (4 Marks)
9. What does the CT stand for in CT scan radiology exam` (2 Mark)
10. Differentiate between accuracy and sensitivity as parameters used in assessing medical equipment (4 Marks)
11. Most patient with immobility issues require mobility aid equipment. Name any FOUR mobility aids equipment (4 Marks)

SECTION B: (60 MARKS)

*Attempt Only **THREE** questions*

12. Person X intends to start a private hospital. In order to conduct tests, he needs to have laboratory equipment.
- a) Define laboratory equipment (2 Marks)
 - b) Describe any FOUR equipment X will acquire for his laboratory (8 Marks)
 - c) Explain any FIVE general management of medical equipment (10 Marks)
13. Taking vital signs is important when addressing health needs of the individuals. Mr Y intends to purchase the medical equipment for vital signs taking.
- a) Describe any SIX vital signs the purchased equipment is likely to measure (12 Marks)
 - b) Explain FOUR factors Mr Y should consider before buying such equipment. (8 Marks)
14. Facility Y wants to procure medical devices for newly established branch for effective delivery of services.
- a) Explain FIVE medical devices essential principles. (10 Marks)
 - b) Explain FIVE ways in which the facility will categorize the medical equipment. (10 Marks)
15. Medical Equipment are necessary for day-to-day activities in different health care facilities and medical training centres.
- a) Discuss FIVE objectives of medical Equipment. (10 Marks)
 - b) Explain any FIVE stakeholders of medical equipment (10 Marks)

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