

**091206T4PTT**

**PERIOPERATIVE THEATRE TECHNOLOGY LEVEL 6**

**HE/OS/TT/CR/04/6/A**

**PROVIDE PERIOPERATIVE THEATRE TECHNICAL SERVICES**

**July/August 2024**



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

**WRITTEN ASSESSMENT**

**TIME: 3 HOURS**

**INSTRUCTIONS TO CANDIDATE**

1. This paper consists of two sections; **A** and **B**
2. Answer **ALL** the question as guided in each section
3. Marks for each question are as indicated in the brackets
4. You are provided with a separate answer booklet to answer the questions
5. Do not write in 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 anesthesia machine is a critical apparatus for the success of surgical procedures.  
Outline TWO uses of an anesthetic machine. (2 Marks)
2. Various drugs can be administered intravenously to bring the effect of anesthesia or sedation. Outline FOUR common anaesthetic drugs found in the operating theatre. (4 Marks)
3. Outline THREE precautions when handling air-powered instruments. (3 Marks)
4. The laboratory investigations are basic assessments required before receiving a patient to the operating room for a surgical procedure. Outline any FOUR of these investigations. (4 Marks)
5. Imagine you are preparing for decontamination of instruments after Open Reduction and Internal Fixation (ORIF). Name FOUR characteristics of an ideal cleaning agent used in decontamination in theatre. (4 Marks)
6. As a theatre technologist, you are expected to prepare the operating room in readiness of any procedure. State FOUR aspects to prioritize when preparing the theatre environment. (4 Marks)
7. During the use of a diathermy machine, outline FOUR advantages of using high frequency currents. (4 Marks)
8. Diathermy is a technique that involves the use of high-frequency electromagnetic currents. Outline THREE specific functions of the diathermy electrodes. (3 Marks)
9. As a theatre technologist, you are aware that the different sterilization methods have advantages and disadvantages. Outline FOUR disadvantages of autoclaving as a method of sterilization. (4 Marks)
10. The ideal operating theatre suite is organized into several zones. Outline TWO advantages of organizing the theatre into different zones. (2 Marks)
11. When referring faulty apparatus to the maintenance department, what are FOUR actions that you would take? (4 Marks)
12. Lighting in the operating room is distributed throughout the room evenly by the operating lights. Outline TWO other features of an operating theatre lights. (2 Marks)

**SECTION B: (60 MARKS)**

*Answer only THREE questions in this section*

13. The entire theatre team should be familiar with the draping procedure, since it is an important step in preparation of the patient for operation. Describe TEN principles applied during draping. (20 Marks)
14. An operation theatre technician prepares the theatre environment for anesthesia with a primary goal of keeping the patient as safe as possible throughout the perioperative period.
- a) Explain the use of the following assistive devices in anesthesia. (4 Marks)
- i. Mechanical ventilator
  - ii. Stylet
  - iii. System for Anesthetic and Respiratory Analysis (SARA)
  - iv. Peripheral nerve stimulator
- b) Describe how you will check the functioning of the following components of an anesthesia machine. (15 Marks)
- i. Fail safe system
  - ii. Waste gas scavenging system
  - iii. Breathing system
  - iv. Gas supply
  - v. Mechanical ventilator
- a) Briefly explain why an anesthetised patient is at a greater risk for positioning injury. (1 Mark)
15. Documentation in theatre is an important way of ensuring accountability and evidence of the available equipment and accessories.
- a) Discuss FIVE types of documentation tools and registers found in the operating theatre. (10 Marks)
- b) Explain FIVE roles of a theatre technologist in the documentation process. (10 Marks)
16. Suction machine is a type of aspirator that is critical in the operation room.
- a) Explain FIVE uses of a suction machine. (10 Marks)
- b) Outline FIVE components of a suction machine and state their functions. (10 Marks)

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