

091206T4PTT

PERIOPERATIVE THEATRE TECHNOLOGY LEVEL 6

HE/OS/TT/CR/02/6/A

PREVENT NOSOCOMIAL INFECTIONS

July/August 2024



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

WRITTEN ASSESSMENT

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 FOUR (4) printed pages

Candidates should check the question paper to ascertain that all pages areprinted as indicated and that no questions are missing

SECTION A: (40 MARKS)

Answer ALL the questions in this section

1. Personal protective equipment (PPE) is provided under the Occupational Safety and Health Standards (OSHS) for all health care workers. State FOUR factors to consider when selecting PPE. (4 Marks)
2. Standard precautions are the work practices required to achieve a basic level of infection prevention and control. State any FOUR of these standards. (4 Marks)
3. Explain the following parameters in relation to prevention of infections in the sterilization process. (4 Marks)
 - i. Bioburden
 - ii. Bio-resistance
 - iii. Biostate
 - iv. Bioshielding
4. Patient X is scheduled for an operation at 10:00am. Highlight FOUR key components to check on the patient. (4 Marks)
5. Theatre cleaning is done routinely before, during and after procedure.
 - a) Mention TWO areas in the aseptic zone that must be cleaned first (2 Marks)
 - b) State TWO safety precautions taken after cleaning procedure (2 Marks)
6. Laminar air flow is one of the ventilator system routinely used in theatre. Outline FOUR advantages of lamina air flow. (4 Marks)
7. Aseptic technique is a set of practices that protects both patients and healthcare workers from healthcare-associated infections. Outline FOUR instances where aseptic technique is applied. (4 Marks)
8. After decontamination, it is important to inspect the instruments before packaging. State FOUR aspects that should be factored in during this process. (4 Marks)
9. In the course of identifying a patient, you decide to check the file to confirm whether the patient is fully prepared for surgery. Enumerate FOUR main preoperative preparations usually done for a patient due for a procedure. (4 Marks)
10. Positions in an operating theatre are assumed depending with the type of surgery being performed. Identify the position assumed for each of the following surgeries: (4 Marks)

- i. Shoulder and neurosurgeries-
- ii. Caesarian section-
- iii. Colorectal surgeries-
- iv. Lateral chest surgery-

SECTION B: (60 MARKS)

*Answer any **THREE** questions from this section*

11. Safe management of health care waste is a key issue in controlling and reducing nosocomial infections.
- a) Categories FIVE types of waste generated in an operating theatre. (10 Marks)
 - b) Describe FIVE key steps in the management of health care waste. (10 Marks)
12. As a theatre technologist on duty one of your responsibilities is to prepare and pack instruments for surgical procedures.
- a) Describe FIVE steps followed in instrument processing. (10 Marks)
 - b) To prevent surgical site infections, instruments must be used for their right purpose. Classify the following instruments found in a general set and state their function. (10 Marks)
 - i. Curved Scissors
 - ii. Babcock
 - iii. Artery clamp
 - iv. Army navy retractors
 - v. Cytoscope
13. A post-operative patient with an infectious disease is being managed in the isolation room and you are part of the team responsible for managing the patient.
- a) Explain THREE reasons why it is important to wear personal protective gear while in the operation suite. (6 Marks)
 - b) Outline the steps followed during the following processes:
 - i. Donning (7 Marks)
 - ii. Doffing (7 Marks)
14. An operating theatre is a complex system with numerous risk factors, including the management and behavior of healthcare workers.
- a) Describe FIVE causes of medical surgical errors in an operating theatre. (10 Marks)
 - b) Describe FIVE components of the theatre checklist in preventing medical errors. (10 Marks)

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