

091205T4PTT

PERIOPERATIVE THEATRE TECHNOLOGY LEVEL 5

HE/OS/TT/CR/02/5/A

Prevent Nosocomial Infections

July/Aug 2023



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

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. This paper has three sections **A**, **B** and **C**.
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 SEVEN 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: (20 MARKS)

Attempt all questions.

Each question carries one (1) mark.

1. When performing instrument preparation process. The recommended concentration of sodium hypochlorite (Jik) solution is:
 - A. One part of sodium hypochlorite to six parts of water
 - B. One part of sodium hypochlorite to nine parts of water
 - C. Dependent with manufacturer's instructions
 - D. Dependent with workplace policies
2. Which one of the following is a sterilization method?
 - A. Dis-infection
 - B. Autoclaving
 - C. Use of Jik Solution
 - D. Boiling up to 40 degrees
3. What is the importance of laminar flow system in an operating theatre?
 - A. Reduces airborne contamination during surgery.
 - B. Prevents a lot of sweating among the theatre team.
 - C. Helps preserve sterility of theater packs.
 - D. Supports the weight of the patient during surgery.
4. Who among the following is responsible for providing you with personal protective equipment in the health facility?
 - A. Your employer
 - B. Your supervisor
 - C. Your co-worker
 - D. Yourself
5. Which colour-coded bin should you use when disposing infectious clinical waste?
 - A. Red
 - B. Yellow
 - C. Green
 - D. Purple

6. A 21-year-old patient is positioned on the OR bed prior to knee surgery. The anesthesiologist administers general anesthesia. What is the next step in the preparation of this patient?
 - A. Grounding
 - B. Hanging IV fluids
 - C. Giving blood
 - D. Intubating

7. What is a Surgical Safety Checklist (SSC)?
 - A. A tool to reduce the risk of preventable complications during the perioperative period
 - B. A list of equipment that will be required during the surgery
 - C. A tool to ensure that all staff in the practice are prepared for an emergency situation
 - D. A document listing all the roles of staff members in the operating theatre

8. An antiseptic is:
 - A. Chemicals that kill or prevent infection and damage living tissues
 - B. Chemicals that kill or prevent infection without damaging living tissues
 - C. Chemicals that are only used on inanimate surfaces
 - D. Chemicals used to autoclave instruments in theatre

9. All of the following helps in identification of patient in theater, except:
 - A. Patient theatre checklist
 - B. Patient file
 - C. Identification band
 - D. Patient dress code

10. The main purpose of cleaning instruments at the point of use is:
 - A. Kill the microorganisms
 - B. Make the decontamination process shorter
 - C. Prevent blood and debris from drying on the instruments
 - D. Prevent corrosion and rusting of the instruments

11. The absence of all forms of microbial life, including spores, is known as:
- A. Sanitization
 - B. Disinfection
 - C. Decontamination
 - D. Sterility
12. The patient is supine and the head of the bed is elevated to 45 to 60 degrees. This position is called:
- A. Semi-Fowler's Position
 - B. High Fowler's Position
 - C. Sim's Position
 - D. Fowler's Position
13. An antiseptic most preferred for surgical hand scrub and client skin preparation is:
- A. Savlon
 - B. Betadine
 - C. Cidex
 - D. Iodine
14. One way to maintain aseptic technique during surgery is to:
- A. Open the sterile pack before procedure to confirm whether they are sterile or not
 - B. Consider items located below the level of the draped client to be unsterile
 - C. Allow sterile personnel to reach across unsterile areas and touch unsterile items
 - D. Allow unsterile personnel to reach across the sterile field or to touch sterile items
15. Body tissues or parts are:
- A. Non-infectious and are disposed in black coded bins
 - B. Infectious and are disposed in red coded bins
 - C. Highly infectious and are disposed in red coded bins
 - D. Infectious and are disposed in yellow coded bins
16. Which of the following is MOST resistant during processing of surgical instruments?
- A. Virus
 - B. Spore
 - C. Bacteria
 - D. Fungus

17. Which is the appropriate guideline when storing sterilized instruments?
- A. 20 inches off the floor
 - B. 8 inches above the floor
 - C. 45 centimeters from the outside wall.
 - D. 15 centimeters from the ceiling
18. A patient who has been received in the recovery room after surgery should be kept in the following position:
- A. Sitting
 - B. Flat
 - C. Recovery
 - D. Semi-sitting
19. Use of a clothing material for the purposes of sterilization of theatre packs refers to the following principle of resource management:
- A. Re-cycle
 - B. Reduce
 - C. Re-use
 - D. Rehabilitate
20. In chemical sterilization, the sterilizing chemical should be changed after:
- A. 7 days
 - B. 24 hours
 - C. 14 days
 - D. 10 days

SECTION B: (40 MARKS)

*Answer **all** the questions in this section*

21. Laminar airflow is one of the ventilator systems routinely used in theatre.
Differentiate between horizontal airflow and vertical airflow (4 marks)
22. State any FOUR methods used in sterilization process in the central sterile services department (CSSD). (4 marks)
23. Identify THREE types of gloves used in the hospital (3 marks)
24. You are a scrub person for caesarian section procedure. Outline THREE indicators that you will use to verify the sterility of CS set. (3 marks)
25. Identify any FOUR methods that can be used to dispose of operation theatre waste. (4 marks)
26. You are asked to assemble instruments and sterilize, outline THREE methods you will use in sterilization (3 marks)
27. State FIVE guidelines one should follow to ensure proper steam contact when using steam to sterilize instruments (5 marks)
28. After decontamination it's important to inspect the instruments before packaging. State FIVE aspects that should be inspected in instruments and apparatus (5 marks)
29. You are preparing a surgical site before a surgery, state THREE factors which determine how the surgical site is prepared (3 marks)
30. State THREE purposes of proper waste management (3 marks)
31. In adherence to operating room cleaning policy, in which instances should the operation room be cleaned (3 marks)

SECTION C: (40 MARKS)

Attempt any two questions in this section.

32. When preparing instruments for sterilization in the central sterile services department (CSSD) they should be properly packed.
- a. Highlight SIX qualities of a good wrapping material (6 marks)
 - b. State FIVE guidelines you should adhere to when assembling instruments (5 marks)
 - c. Describe THREE material used in packaging instruments for sterilization (6 marks)
 - d. Describe THREE packaging methods used when packaging instruments for sterilization. (3 marks)
33. Proper handling of medical waste is important to protect the patient, health workers and community from infections.
- a. State THREE guidelines on handling of sharps (3 marks)
 - b. State FOUR examples of hazardous waste (4 marks)
 - c. Describe the FIVE WHO recommended color coding for healthcare waste segregation (5 marks)
 - d. Explain FOUR methods of healthcare waste treatment and disposal (8 marks)
34. You are a perioperative theatre technologist on duty and you are allocated to give a health education on standard precaution and effective use of personal protective equipment's to a group of students in theatre.
- a. State FOUR individuals who should use personal protective equipment's (4 marks)
 - b. Highlight THREE types of hand hygiene (3 marks)
 - c. State SEVEN principles for using personal protective equipment's (7 marks)
 - d. Other than gloves, highlight six other personal protective equipment's that are used in a theatre set up (6 marks)