

091205T4PTT

PERIOPERATIVE THEATRE TECHNOLOGY 5

HE/OS/TT/CR/04/5/A

Provide Perioperative Theatre Technical Services

Nov/Dec 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 7 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)

Answer all questions in this section.

Each question carries one Mark.

1. The absence of all forms of microbial life, including spores, is known as
 - A. Sensitization
 - B. Disinfection
 - C. Decontamination
 - D. Sterility
2. Where are test packs placed to present the greatest challenge to the steam sterilizer.
 - A. Bottom rack back
 - B. Top rack back
 - C. Center
 - D. Over the drain
3. With respect to principles of surgical asepsis, when you are in doubt about the sterility of an item, you should:
 - A. “Throw it out”
 - B. “Test its sterility”
 - C. “Ignore the red flags”
 - D. “Sterilize it”
4. Which of the following is not a suitable type of eye protection in healthcare?
 - A. Prescription glasses
 - B. Polycarbonate protective glasses
 - C. Goggles
 - D. Face shields
5. When must you remove and change out of single use PPE?
 - A. After completing a ward round
 - B. After any patient contact
 - C. At the end of your shift
 - D. Only if it gets damaged
6. How can medical gloves be made reusable?
 - A. With an alcohol-based hand rub
 - B. They can't - medical gloves must always be disposed of after use
 - C. Washing them with water and soap

- D. By sending them off to be reprocessed at a decontamination facility
7. The time elapsed from the point the machine fails to perform its function to the point it is repaired and brought into operating condition is known as
- A. Down time
 - B. Break Down time
 - C. Both (A) and (B)
 - D. Idle time
8. Any repair and upkeep of an operation theatre apparatus performed within a set timeframe is
- A. Corrective maintenance
 - B. Timely maintenance
 - C. Scheduled maintenance
 - D. Preventive maintenance
9. What is the difference between rebreather and non-rebreather patient breathing systems?
- A. In rebreather, a fresh gas supply is delivered to the patient with every respiration which is not the case in a non-rebreather
 - B. Non-rebreather uses a bidirectional valve while rebreather uses unidirectional valve
 - C. In rebreather, the patient inhales some of the expired air while in non-rebreathing the patient does not.
 - D. Non-rebreather is less effective than rebreather.
10. Safety box should be disposed often when it is: -
- A. Full
 - B. Half full
 - C. Two third full
 - D. Third full
11. During operation, the last accessory to be worn by the scrub person is always the: -
- A. Goggles
 - B. Gown
 - C. Theatre boots
 - D. Surgical gloves
12. The last item to be brought into operation room prior a surgery is the: -
- A. Diathermy machine

- B. Surgical set
 - C. Suction machine
 - D. Tray
13. Unused sterile disposed items may be hazardous hence should always be
- A. Reused
 - B. Disposed
 - C. Repacked
 - D. Reprocessed
14. Regarding the sterility of the sterile team member attire, the theatre technician understands that:
- A. The gown is sterile at the back and front
 - B. The gown is considered sterile from the waist to the level of the chin
 - C. The gown is considered sterile up to 2 inches above the elbows on the sleeves
 - D. The gown is donned after the sterile gloves.
15. The sterile electrode that allows direct flow of current to the surgical site is the :-
- A. Patient return electrode
 - B. Active electrode
 - C. Inactive dispersed electrode
 - D. Inactive return electrode
16. Techniques involving invasive diagnostic procedures are: -
- A. Non-invasive
 - B. Invasive
 - C. Diagnostic
 - D. Interventional
17. The theatre apparatus are best kept in the: -
- A. Receiving area
 - B. Untreated area
 - C. Store
 - D. Operating room
18. The method of sterilization for killing spores of bacteria is: -
- A. Moderate chemical sterilization
 - B. High level chemical sterilization
 - C. Autoclaving as sterilization
 - D. Low level chemical sterilization

19. Sharp apparatus should always be processed through
- A. Chemical sterilization
 - B. Disinfection
 - C. Autoclaving
 - D. Cleaning
20. The red-coded bin is meant for disposal of :-
- A. Non- infectious masks
 - B. Infectious wastes
 - C. Highly infectious waste
 - D. Sharps

SECTION B: (40 MARKS)

Attempt all questions in this section.

21. Infection prevention is paramount when providing theater technical services. Identify FIVE personal protective gear that should be used. (5 marks)
22. As a preoperative theatre technologist, it is key to decontaminate instruments and apparatus after use. State FOUR activities that are carried during instrument decontamination. (4 marks)
23. Theatre room rearrangement is essential after every procedure. Identify THREE reasons for rearranging theatre room after use. (3 marks)
24. Proper lighting is a key resource during surgical operations. What are FIVE qualities of lighting used in the operation room to achieve this? (5 marks)
25. State THREE functions of an arm board. (3 marks)
26. Outline THREE functions of head extension. (3 marks)
27. Gasses that are passed into the anesthetic machine are identified by the international colour codes. Identify THREE gases and their respective colour codes. (3 marks)
28. State SEVEN principles of surgical asepsis. (7 marks)
29. State THREE apparatus you would prepare ahead of a craniotomy procedure. (3 marks)
30. Anesthesia machines should have well stocked drawers for effectiveness in theater technical services. Which FOUR items will you ensure are in the drawer of the anesthesia machine? (4 marks)

SECTION C: (40 MARKS)

Attempt any two questions from this section

31. Electrosurgery is achieved through use of diathermy machine (Electrosurgery unit).
- a) State FIVE reasons of using diathermy machine. (5 marks)
 - b) Describe FIVE principles of safety when using diathermy machine. (15 marks)
32. A perioperative theater technologist needs to be knowledgeable on the layout of theater for effective and appropriate preparation of theatre environment. Theatre layout comprises of zones/areas.
- a) Explain FOUR reasons for zoning. (8 marks)
 - b) Describe the FOUR zones that constitute a theatre layout. (12 marks)
33. Mr. X, a 22-year-old male is scheduled for an elective appendectomy procedure in your operating room.
- a) Explain FIVE ways on how you would ensure that the operating room is prepared before the surgery. (10 marks)
 - b) Explain FIVE ways on how you would ensure that the operating room is prepared after surgery. (10 marks)

END