

## Chapter 1: Instruments, Care of Instruments, Set-up Guidelines

### Multiple Choice

1. Which part of the instrument that determines the overall length of the instrument?

- a. Screw joint
- b. Blade
- c. Shank
- d. Tip

ANS: c

DIF: Medium

2. Another name for the boxlock is:

- a. Hinge joint
- b. Screw joint
- c. Shank
- d. Finger ring

ANS: a

DIF: Medium

3. A camera would fall into which classification of instruments?

- a. Retracting and Exposing
- b. Accessory
- c. Probing and Dilating
- d. Viewing

ANS: d

DIF: Easy

4. Most surgical instruments are made of:

- a. Bronze
- b. Titanium
- c. Stainless Steel
- d. Aluminum

ANS: c

DIFF: Easy

5. A black finish on an instrument makes it safer to use with:

- a. laser
- b. electrocautery pencil
- c. endoscope
- d. camera

ANS: a

DIFF: Medium

6. Instruments that are used to remove fluid, blood and debris from the surgical site are classified as:

- a. Probing and Dilating
- b. Clamping and Occluding
- c. Retracting and Exposing
- d. Suctioning and Aspirating

ANS: d

DIFF: Easy

7. During the case, instruments should be wiped clean or placed in a soaking basin containing:

- a. Saline
- b. Tap water
- c. Sterile water
- d. Hydrogen Peroxide

ANS: c

DIF: Medium

8. Cold or chemical sterilization is not recommended for instruments with:

- a. Tungsten carbide tips
- b. Stainless steel shanks
- c. Stainless steel tips
- d. Supercut blades

ANS: a

DIF: Hard

9. Tissue, blood, or debris on instruments is referred to as:

- a. Biomolecules
- b. Bioburden
- c. Biodegradeable
- d. Biomess

ANS: b

DIFF: Medium

10. You are setting up a case and notice the blades on the Metzenbaum scissors are slightly misaligned. What do you do?

- a. Keep setting up and hope no one notices- time is of the essence
- b. Remove them from the field and ask for a new one
- c. Say nothing, it is only a “slight” misalignment
- d. Toss them on the floor and tell the Circulator you need a new one

ANS: b

DIF: Easy

11. When cleaning up after a case, heavy instruments should never be placed:

- a. On the bottom of the tray
- b. Beside other heavy instruments
- c. On top of more delicate instruments
- d. In their special containers (if they have one)

ANS: c

DIF: Medium

12. The most common method of sterilization is:

- a. Steam under pressure
- b. Immediate use
- c. Cold Chemical
- d. Radiation

ANS: a

DIF: Easy

13. A Dynamic Air Removal sterilizer is more commonly known as a:

- a. Flash sterilizer
- b. Prevacuum sterilizer
- c. Gravity displacement sterilizer
- d. Immediate Use sterilizer

ANS: b

DIF: Hard

14. When using glutaraldehyde to sterilize an instrument, the instruments must soak in it for \_\_\_\_\_ to be deemed sterile.

- a. 20 minutes
- b. 60 minutes
- c. 4 hours
- d. 10 hours

ANS: d

DIF: Hard

15. You are scrubbed on a total hip and one of the implants get contaminated. The circulator goes out to look for another one and comes back saying that is the last one of that size that they have available in the OR. What do you do?

- a. Tell the surgeon to cancel the surgery and start picking up your instruments
- b. Sterilize it using immediate use sterilization with an indicator tape in the pan
- c. Sterilize it using immediate use sterilization with a biological monitoring device in the pan
- d. Tell the surgeon to use another size implant

ANS: c

DIF: Medium

16. You are assigned to scrub a laparoscopic cholecystectomy. When should you begin to set up your sterile field?

- a. 2 hours prior to the case
- b. As close to the start of the case as possible
- c. 3 hours prior to the case
- d. 2 hours prior to the case and cover it with a sterile sheet

ANS: b

DIF: Medium

17. You are scrubbed on an exploratory laparotomy. When should you ask for your dressing material?

- a. At the beginning of the case
- b. In the middle of the case
- c. At the end of the case
- d. While you are setting up

ANS: c

DIF: Medium

18. You are scrubbed on a laparoscopic appendectomy. Which instrument would NOT be placed on your Mayo stand to begin the case, due to limited space?

- a. Scalpel handle with blade
- b. Superficial retractor
- c. Trocars
- d. Deep retractor

ANS: d

DIF: Easy

19. When setting up your sterile field, where should you place the basins and medicine cups ?

- a. Near the middle of the back table
- b. Near the back of the table, away from the circulator
- c. Near the edge of the table so the circulator can pour without reaching over the table
- d. In the middle of the Mayo stand

ANS: c

DIF: Easy

20. Forceps consist of \_\_\_\_\_ parts.

- a. 3
- b. 4
- c. 5
- d. 6

ANS: c

DIF: Hard

## Short Answer

21. Name two ways in which a ringed instrument may function.

ANS: clamping and occluding, grasping and holding, suturing

DIF: Medium

22. List four parts of a ringed instrument.

ANS: tips, jaws, boxlock, shank, ratchet, finger rings

DIF: Medium

23. What is the function of the joint on a forceps?

ANS: Holding the forceps open until they are compressed.

DIF: Hard

24. What happens when dissimilar metals come in contact with each other in a hot, wet environment like an ultrasonic cleaner?

ANS: the metals can plate to each other, causing permanent damage to the instruments

DIF: Hard

25. If the ring handles on a scissor are black, generally means what?

ANS: They are Supercut scissors (which means they have a razor sharp upper blade)

DIF: Hard

26. Name three methods of sterilization used for surgical instruments.

ANS: steam under pressure, cold chemical, gas plasma, ethylene oxide, radiation

DIF: Medium

27. In order to kill microbial life, the temperature of the steam in the sterilizer must be:  
ANS: 250F- 270F  
DIF: Hard

28. Scissors are classification as what type of instruments?  
ANS: Cutting and Dissecting  
DIF: Easy

29. When can you use immediate use sterilization to sterilize an implant?  
ANS: Only in an emergency, when there is no other choice  
DIF: Medium

30. What is the most common form of cold chemical sterilization used in the operating room?  
ANS: peracetic acid (or Steris system)  
DIF: Medium

## **Completion**

31. Along with the tips, the \_\_\_\_\_ are considered the working part of a ringed instrument.  
ANS: jaws  
DIF: Easy

32. Instruments that do not fall into any of the other instrument classifications are classified as \_\_\_\_\_ instruments.  
ANS: accessory  
DIF: Easy

33. Instruments that need nitrogen or batteries to run are classified as \_\_\_\_\_ instruments.

ANS: power

DIF: Medium

34. Which component of stainless steel makes the instrument more resistant to corrosion?

ANS: Chromium

DIF: Hard

35. Prior to the start of the case, rigid scope shafts should be checked to make sure they are \_\_\_\_\_.

ANS: straight

DIF: Easy

36. At the end of the case, heavy instruments should be placed in the \_\_\_\_\_ of the tray.

ANS: bottom

DIF: Easy

37. Glutaraldehyde is used in \_\_\_\_\_ sterilization.

ANS: cold chemical

DIF: Medium

38. Keep the number of instruments on the Mayo stand to a \_\_\_\_\_.

ANS: minimum

DIF: Easy



39. Check instruments for \_\_\_\_\_ before placing them on the Mayo stand or back table.

ANS: damage (bioburden would also be an acceptable answer)

DIF: Easy

40. \_\_\_\_\_ your motion around the Mayo stand and back table.

ANS: Minimize

DIF: Medium

### **True or False**

41. The boxlock determines the length of the instrument.

ANS: False

DIF: Easy

Rationale: The shank determines the length of the instrument.

42. Scissors consist of five basic parts.

ANS: True

DIF: Medium

43. On a retractor, the blade determines how far into the surgical wound the retractor can be inserted.

ANS: True

DIF: Easy

44. Microinstruments can be used to cut dressings or drains.

ANS: False

DIF: Easy

Rationale: Microinstruments are delicate and should only be used on delicate tissue or sutures.

45. A scissor that has one short and one long gold-plated ring handle is a Supercut scissors.

ANS: False

DIF: Medium

Rationale: A scissor that has one short and one long gold-plated ring handle is a combination of the Super Cut upper blade and tungsten carbide.

46. You are inspecting your instruments and find a couple of tiny specks of blood in the jaws of a hemostat. This instrument is OK to use on a patient.

ANS: False

DIF: Medium

Rationale: Any instrument found to contain bioburden must be removed and replaced.

47. The pressure needed to raise the temperature of the steam to 270F is 25 psig.

ANS: False

DIF: Hard

Rationale: The pressure needed to raise the temperature of the steam to 270F is 27 psig.

48. Prevacuum sterilizers operate at 260F.

ANS: False

DIF: Hard

Rationale: Prevacuum sterilizers operate at 270F.

49. If you need to use immediate use sterilization, all items must be unwrapped.

ANS: True

DIF: Easy

50. The Steris sterilization system uses a sterilant containing 35% glutaraldehyde.

ANS: False

DIF: Hard

Rationale: The Steris sterilization system uses a sterilant containing 35% paracetic acid.

51. Remove and replace instruments on the Mayo stand as necessary as the surgery progresses.

ANS: True

DIF: Easy

52. When setting up your back table, group all like sponges together.

ANS: True

DIF: Easy

53. Ask for your dressings at the mid-point in the surgery.

ANS: False

DIF: Medium

Rationale: Ask for your dressings at the end of the procedure so they do not get mixed up and counted with the sponges.

54. Develop a logical, organized and efficient approach to setting up.

ANS: True

DIF: Easy

55. Instruments used to explore a structure are classified as grasping and holding.

ANS: False

DIF: Medium

Rationale: Instruments used to explore a structure are classified as probing and dilating.