

Section Five

Content Outline

SURGICAL FIRST ASSISTANT CERTIFYING EXAMINATION CONTENT OUTLINE

The content of the examination is based on tasks performed by CSFAs nationwide. A job analysis survey was conducted to identify specific tasks related to the frequency and importance of Surgical First Assistants nationwide. The results of the job analysis were used to develop the content outline for the examination, which is evaluated on a prescribed schedule to ensure that the overall examination content reflects current surgical first assistant practice.

The CSFA examination consists of 175 questions, 150 of which are scored. The 25 pretest items (unscored) are randomly distributed throughout the examination for the purpose of analysis and statistical evaluation. The passing score is the minimum number of questions that must be answered correctly. Candidates should refer to nbtsa.org for the number of questions which must be answered correctly in order to obtain a passing score. Score reports are provided to all candidates who take the examination.

I. PERIOPERATIVE CARE (65 items)

A. Preoperative Preparation (13 items)

1. Verify operative consent and other pertinent information (e.g., history and physical, advanced directives, laboratory results, diagnostic results).
2. Review patient medical chart and associated documentation.
3. Acquire radiographic images for intraoperative reference.
4. Review diagnostic tests to identify results.
5. Anticipate the needs of the surgical team prior to entering the operating room.
6. Prepare and maintain operating room environment according to surgical procedure (e.g., temperature, humidity, lights, suction, furniture).
7. Select appropriate equipment/supplies needed for procedure.
8. Verify availability of surgical equipment and supplies (e.g., reserve equipment and implants for surgery according to surgeon's preference).
9. Identify grafts for tissue transplantation.

10. Obtain instruments, supplies, and equipment and verify readiness for surgery.
11. Select appropriate patient positioning devices.
12. Don personal protective equipment.
13. Check package integrity of sterile supplies.
14. Open sterile supplies while maintaining aseptic technique.
15. Assess and reduce risk for intraoperative injuries.
16. Transfer the patient.
17. Remove external appliances.
18. Perform open and closed gloving techniques.
19. Insert Foley urinary bladder catheter.
20. Place pneumatic tourniquet.
21. Position the patient.
22. Utilize antiembolic devices.
23. Utilize thermoregulatory devices.
24. Utilize appropriate skin preparation techniques.
25. Perform surgical hand scrub, gowning, and gloving.
26. Coordinate and participate in the draping of the patient.
27. Gown and glove sterile team members.
28. Participate in Universal Protocol (Time Out).
29. Specify methods of operative exposure (e.g., surgical incisions).

B. Intraoperative Procedures (45 items)

1. Facilitate the efficiency of the surgical procedure.
2. Provide assistance to the rest of the surgical team in the assessment and care of the patient.
3. Apply knowledge of disease processes as related to surgical intervention.
4. Observe patients intraoperative status (e.g., monitor color of blood, onset of blood loss, monitor position of patient during procedure).
5. Initiate corrective action for any break in sterile technique.
6. Pass needed instruments, sutures, supplies and other equipment.
7. Manipulate body tissues and anatomic structures (e.g., Halsted's Principles, tissue manipulation methods, traction/counter traction).
8. Provide visualization and exposure of the operative site.
9. Apply appropriate tissue retraction techniques.

Section Five

Content Outline

10. Utilize appropriate techniques for tissue dissection.
11. Operate specialty equipment (e.g., endoscopic devices, harmonic scalpel, power equipment).
12. Select appropriate methods for hemostasis.
13. Apply manual hemostasis.
14. Apply direct digital pressure.
15. Apply thermal hemostasis.
16. Apply chemical hemostatic agents.
17. Apply hemostatic clips
18. Clamp and tie tissue.
19. Pack surgical sites with sponges.
20. Apply intraoperative tourniquets (e.g., Rummel, Pringle).
21. Utilize vessel loops.
22. Facilitate the use of stapling devices.
23. Procure grafts for tissue transplantation.
24. Prepare grafts for tissue transplantation.
25. Irrigate surgical wound.
26. Utilize appropriate suction equipment and techniques.
27. Assist in minimally invasive and robotics cases.
28. Assist in I & D procedures.
29. Assist in wound debridement.
30. Handle specimens appropriately.
31. Select appropriate wound drainage or vacuum devices.
32. Assist in the placement and securing of surgical drains, catheters and tubes.
33. Select appropriate methods for wound closure.
34. Select appropriate wound closure materials.
35. Close all wound layers under direction of surgeon.
36. Utilize subcutaneous closing techniques.
37. Close skin under direction of surgeon.
38. Monitor use of supplies and solutions.

C. Postoperative Procedures (7 items)

1. Dispose of contaminated sharps, wastes and supplies in compliance with Standard Precautions.
2. Change dressings.
3. Apply appropriate wound dressing.
4. Apply wound drainage or vacuum devices.
5. Apply splints/casts.
6. Assist in casting techniques.
7. Remove sutures and/or staples.
8. Transport patient.

II. ANCILLARY DUTIES (30 items)

A. Administrative and Personnel (13 items)

1. Serve as technical subject matter expert to the rest of the surgical team.
2. Use effective communication skills to relay patient specific considerations.
3. Use interpersonal skills (e.g., listening, diplomacy, responsiveness) and group dynamics.
4. Understand the importance of cultural diversity.
5. Apply ethical and legal practices related to surgical patient care.
6. Monitor appropriate environmental controls (e.g., temperature, air exchanges, humidity).
7. Assist in resuscitation of patient during cardiac arrest or other life threatening events.
8. Follow All Hazards emergency protocols.
9. Recognize safety and environmental hazards (e.g., radiologic equipment, fire, chemical spill, tissue plume).

B. Equipment Sterilization and Maintenance (17 items)

1. Operate sterilizing devices according to manufacturer's recommendations.
2. Troubleshoot equipment malfunctions.
3. Report malfunctioning equipment to proper personnel.
4. Maintain effective:
 - a. disinfection practices.
 - b. sterilization practices.
5. Maintain current knowledge of operative equipment:
 - a. diagnostic equipment.
 - b. electrosurgery units (e.g., monopolar, bipolar, vessel sealing).
 - c. equipment to aid in patient positioning.
 - d. endoscopic instruments and equipment.
 - e. staplers.
 - f. positioning and stabilizing equipment.
 - g. suction machine.
 - h. doppler.
 - i. microscope.
 - j. dermatome and mesher.
 - k. power equipment (e.g., drills, saws).

III. ADVANCED SCIENCE (55 items)

A. Advanced Anatomy and Physiology (34 items)

1. Apply knowledge of advanced surgical anatomy and physiology.

Section Five

Content Outline

2. Apply advanced knowledge of pathophysiology and histology to handling and manipulation of tissue for:
 - a. abnormal anatomy (e.g., gastrointestinal tract, genitourinary tract, neurological, cardiothoracic, congenital defects).
 - b. disease processes (e.g., gastrointestinal tract, genitourinary tract, cardiovascular, respiratory, endocrine).
 - c. fractures (e.g., hip, shoulder, wrist, ankle, pelvis/spine).
 - d. malignancies (e.g., carcinomas, sarcomas, neurological malignancies, lymphatic malignancies, metastatic disease).

B. Advanced Principles Of Microbiology **(8 items)**

1. Practice Standard Precautions.
2. Apply the following principles of surgical microbiology to operative practice:
 - a. classification and pathogenesis.
 - b. factors influencing wound healing (e.g., condition of patient, infectious processes, wound type).
 - c. infection control procedures (e.g., aseptic technique).
 - d. surgical wound classification.

C. Surgical Pharmacology and Anesthesia **(13 items)**

1. Apply advanced knowledge of pharmacology and anesthesia concepts to operative practice to:
 - a. assist physician in treating pharmacologic and/or complications.
 - b. handle and administer pharmacologic agents.
 - c. identify situations in which blood and fluid replacement is needed.
 - d. recognize signs and symptoms of drug reactions and interactions.
 - e. the use of anesthesia methods to assist anesthesia providers.
2. Verify medications and solutions at the sterile field.
3. Calculate amount of medications and solutions used.
4. Mix medications and solutions at the sterile field.
5. Administer local anesthesia.
6. Remain aware of patient vitals.

Effective date 1/2/2019

SAMPLE QUESTIONS FOR THE CSFA EXAMINATION

The following questions are representative of those which appear on the CSFA examination. For the following questions, choose the one best answer to each.

1. What is the desired effect of atropine when used as a preoperative medication?

- A. Drowsiness
- B. Pain relief
- C. Decreased anxiety
- D. Drying of secretions

2. The word "hernia" is a Latin term meaning what?

- A. Defect
- B. Rupture
- C. Opening
- D. Closure

3. What type of incision is usually used for an open cholecystectomy?

- A. McBurney's
- B. Pfannenstiel
- C. Lower Midline
- D. Right Subcostal

4. The main consideration in surgical needle selection is:

- A. To minimize microbial growth
- B. Stabilization within the jaws of the needle holder
- C. To minimize trauma
- D. Corrosion resistance

5. Which denotes a civil wrong committed against a person or property, excluding a breach of contract?

- A. Assault
- B. Fraud
- C. Tort
- D. Nonfeasance

ANSWERS: 1-D, 2-B, 3-D, 4-C, 5-C