

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 200 questions, 175 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. PERI-OPERATIVE CARE (80 items)

A. Pre-Operative Preparation (15 items)

1. Verify availability of surgical equipment and supplies (e.g., reserve equipment and implants for surgery according to surgeon's preference).
2. Prepare and maintain operating room environment according to surgical procedure (e.g., temperature, humidity, lights, suction, furniture).
3. Verify operative consent and other pertinent information (e.g., history and physical, advanced directives, laboratory results, diagnostic results).
4. Obtain diagnostic studies for reference.
5. Review diagnostic tests to identify results.
6. Obtain instruments, supplies, and equipment and verify readiness for surgery.
7. Don personal protective equipment.
8. Check package integrity of sterile supplies.
9. Open sterile supplies while maintaining aseptic technique.
10. Perform surgical hand scrub, gowning, and gloving.
11. Gown and glove sterile team members.

12. Coordinate and participate in the draping of the patient.
13. Specify methods of operative exposure (e.g., surgical incisions).
14. Anticipate the needs of the surgical team prior to entering the operating room.
15. Assess and reduce risk for intraoperative injuries.
16. Transfer the patient.
17. Position the patient.
18. Select appropriate patient positioning devices.
19. Utilize appropriate skin preparation techniques.
20. Participate in preoperative "time out" procedures.
21. Select appropriate equipment/supplies needed for procedure.
22. Perform open and closed gloving techniques.
23. Identify grafts for tissue transplantation.
24. Insert Foley urinary bladder catheter.
25. Place pneumatic tourniquet.
26. Acquire radiographic images for intraoperative reference.
27. Remove external appliances.
28. Review patient medical chart and associated documentation.

B. Intra-Operative Procedures (50 items)

1. Provide assistance to the rest of the surgical team in the assessment and care of patient.
2. Facilitate the efficiency of the surgical procedure.
3. Monitor use of supplies and solutions.
4. Handle specimens appropriately.
5. Observe patients intraoperative status (e.g., monitor color of blood, onset of blood loss, monitor position of patient during procedure).
6. Operate specialty equipment (e.g., endoscopic devices, harmonic scalpel, power equipment).
7. Clamp and tie tissue.
8. Apply direct digital pressure.
9. Apply hemostatic clips.
10. Apply intraperative tourniquets (e.g., Rummel, Pringle).
11. Utilize vessel loops.
12. Select appropriate methods for wound closure.
13. Close skin under direction of surgeon.
14. Utilize subcutaneous closing techniques.
15. Close all wound layers under direction of surgeon.

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16. Select appropriate methods for hemostasis.
17. Apply manual hemostasis.
18. Apply thermal hemostasis.
19. Apply chemical hemostatic agents.
20. Select appropriate wound drainage devices.
21. Assist in the placement and securing of surgical drains, catheters and tubes.
22. Apply appropriate tissue retraction techniques.
23. Utilize appropriate techniques for tissue dissection.
24. Assist in wound debridement.
25. Procure grafts for tissue transplantation.
26. Prepare grafts for tissue transplantation.
27. Apply knowledge of disease processes as related to surgical intervention.
28. Initiate corrective action for any break in sterile technique.
29. Irrigate surgical wound.
30. Select appropriate wound closure materials.
31. Manipulate body tissues and anatomic structures (e.g., Halsted's Principles, tissue manipulation methods, traction/counter traction).
32. Pack surgical sites with sponges.
33. Pass needed instruments, sutures, supplies and other equipment.
34. Assist in I & D procedures.
35. Utilize appropriate suction equipment and techniques.
36. Provide visualization and exposure of the operative site.

C. Post-Operative Procedures (15 items)

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

II. ADDITIONAL DUTIES (15 items)

A. Administrative and Personnel (6 items)

1. Follow All Hazards emergency protocols.
2. Recognize safety and environmental hazards (e.g., radiologic equipment, fire, chemical spill, tissue plume).
3. Assist in resuscitation of patient during cardiac

- arrest or other life-threatening events.
4. Monitor appropriate environmental controls (e.g., temperature, air exchanges, humidity).
5. Serve as technical subject-matter expert to the rest of the surgical team.
6. Use effective communication skills to relay patient-specific considerations.
7. Apply ethical and legal practices related to surgical patient care.
8. Use interpersonal skills (e.g., listening, diplomacy, responsiveness) and group dynamics.
9. Understand the importance of cultural diversity.

B. Equipment Sterilization and Maintenance (9 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. electrocautery units (e.g., mono and bi-polar).
 - 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 (80 items)

A. Anatomy and Physiology (60 items)

1. Apply knowledge of advanced surgical anatomy and physiology.
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).

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- 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 **(12 items)**

1. 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.
2. Practice Standard Precautions.

C. Surgical Pharmacology and Anesthesia **(8 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. Mix medications and solutions at the sterile field.
4. Calculate amount of medications and solutions used.
5. Administer local anesthesia.
6. Remain aware of patient vitals.

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