National Board of Surgical Technology and Surgical Assisting



SURGICAL FIRST ASSISTANT CERTIFYING EXAMINATION CONTENT OUTLINE

The CSFA examination content 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 nbstsa.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 (83 items) A. Preoperative Preparation (8 items)

- 1. Pre-op introduction to patient.
- 2. Assist with the plan of care under the direction of a physician.
- 3. Review medical chart: History, Physical, Laboratory results, diagnostic results, and allergies, etc.
- 4. Verify surgical consent.
- 5. Prepare and maintain operating room environment according to surgical procedure (e.g., temperature, humidity, lights, furniture).
- 6. Confirm availability of grafts.
- 7. Confirm availability of any items needed for implantation (e.g., breast implants, tissue expanders, biological mesh, etc.).
- 8. Obtain instruments, supplies, and equipment and verify readiness for surgery.
- 9. Select appropriate patient positioning devices.
- 10. Obtain positioning equipment specific to specialty procedures.
- Verify availability of medical supplies (e.g., vendor trays, suture & hemostatic agents, and "hold" items etc.).
- 12. Select appropriate suture based on: usage, tissue type, and specific wound characteristics.
- 13. Ensure that operating personnel are wearing appropriate attire.

- 14. Perform hand hygiene.
- 15. Verify packaging of sterile supplies; Items are not expired.
- 16. Anticipate the needs of the surgical team prior to entering the operating room.
- 17. Apply safety strap.
- 18. Apply, connect, activate antiembolic devices.
- 19. Assist anesthesia provider.
- 20. Don personal protective equipment.
- 21. Open sterile supplies while maintaining aseptic technique.
- 22. Assist with positioning of patient (e.g., supine, prone, lateral, chest, or lithotomy) considering patient comfort & safety, points of pressure, circulation, nerve damage and familiarity with common positions.
- 23. Remove external appliances.
- 24. Apply return electrode pad.
- 25. Apply pneumatic tourniquet.
- 26. Insert and/or assist with placement of Foley catheter.
- 27. Utilize appropriate skin preparation techniques.
- 28. Perform surgical hand scrub, gowning, and gloving.
- 29. Gown and glove sterile team members.
- 30. Specify methods of operative exposure.
- 31. Perform and/or assist with draping of patient utilizing aseptic technique.
- 32. Throw all cords off of the patient for circulator to connect.
- 33. Perform open and closed gloving techniques.
- 34. Test operational efficiency of equipment prior to use as appropriate.
- 35. Utilize thermoregulatory devices.
- 36. Observe sounds by electrical devices not in use.
- 37. Actively participate in Time Out.

B. Intraoperative Procedures (67 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. Assess and reduce risk for intraoperative injuries.
- 4. Awareness of patients intraoperative status (e.g., vital signs, monitor color of blood, onset of blood loss, monitor position of patient during procedure).
- 5. Manipulate body tissues and anatomic structures (e.g., Halsted's Principles, tissue manipulation methods, traction/counter traction).
- 6. Utilize appropriate techniques for tissue dissection.
- 7. Operate specialty equipment (e.g., endoscopic devices, harmonic scalpel, power equipment).
- 8. Utilize vessel loops.
- Facilitate the use of stapling devices (i.e., intraluminal, linear, robotic, endoscopic, etc.)
 Prepare grafts for tissue transplantation.
- 11. Irrigate surgical wound.
- 12. Utilize appropriate suction equipment and techniques (e.g., liposuction, free-standing powered suction, suction D&C machine, etc.).

- 13. Assist in minimally invasive and robotics cases.
- 14. Assist in I & D procedures.
- 15. Assist in wound debridement.
- 16. Assist with incision.
- 17. Insert of trocars under direct visualization.
- 18. Inject local anesthetic.
- Provide visualization of the operative site using appropriate methods, including: manipulation of tissue and materials, retraction, sponging, suctioning, and irrigation.
- 20. Tie or tag sutures as needed.
- 21. Cut sutures as needed.
- 22. Initiate corrective action for any break in sterile technique: avoid contamination of sterile drapes, personnel, & instruments; and communicate any witnessed or suspected contamination to surgical team.
- 23. Move patient or body part to minimize the potential for iatrogenic injury while providing surgical exposure.
- 24. Monitor traffic in and out of the OR.
- 25. Utilize appropriate techniques to assist with hemostasis - Temporary: apply tourniquets and demonstrate awareness of the indications/ contraindications for use, apply vessel loops, apply non crushing clamps, and apply direct digital pressure.
- 26. Utilize appropriate techniques to assist with hemostasis -Permanent: clamping and/or cauterizing vessels or tissue, tying and/or ligating clamped vessels or tissue, applying hemostatic clips, and placing local hemostatic agents.
- 27. Apply knowledge of anatomy and surrounding structures pertaining to the operative procedure.
- 28. Verification of medication labels.
- 29. Handle sharps appropriately.
- 30. Proper assembly and disassembly of specialty instruments.
- 31. Troubleshoot malfunctioning equipment or call biomedical equipment staff.
- 32. Handle specimens appropriately.
- 33. Select appropriate wound drainage or vacuum devices.
- 34. Assist in the placement and securing of surgical drains, catheters and tubes.
- 35. Monitor use of supplies and solutions during procedure.
- 36. Perform or assist with closure of tissue planes; Suturing, Skin staples.
- 37. Participate in counting sharps, instruments and sponges.
- 38. Apply appropriate suturing techniques for wound closure.
- 39. Protect integrity of catheters, drains, and intravascular lines.
- 40. Observe for alteration of skin integrity.
- 41. Transfer the patient during Intra-Op.

C. Postoperative Procedures (8 items)

- 1. Clean and prepare patient's wound for sterile dressing.
- 2. Apply appropriate wound dressing.
- 3. Remove Foley catheter as indicated.
- 4. Apply negative pressure wound therapy.
- Perform or assist in application of splints or casts.
 Remove drapes, cords, instruments, etc. from
- patient.7. Remove contaminated gown and gloves using
- appropriate technique.8. Ensure patient safety and privacy during emergence from anesthesia.
- 9. Application of immobilization devices.
- Dispose of contaminated sharps, wastes and supplies in compliance with Standard Precautions.
- 11. Change dressings.
- 12. Remove sutures and/or staples.
- 13. Perform hand hygiene
- 14. Assist with room turnover.

II. ANCILLARY DUTIES (21 items)

A. Administrative and Personnel (6 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. Apply ethical and legal practices related to surgical patient care.
- Maintain awareness of appropriate environmental controls (e.g., temperature, air exchanges, humidity).
- 6. Assist in resuscitation of patient during cardiac arrest or other life-threatening events.
- 7. Follow All Hazards emergency protocols.
- 8. Recognize safety and environmental hazards (e.g., lasers, radiologic equipment, fire, chemical spill, tissue plume).
- 9. Apply culturally and socially competent strategies to bridge or mediate between the patient's culture and the care team.

<u>B. Equipment Sterilization and Maintenance</u> (15 items)

 Maintain current knowledge of operative equipment (such as, but not limited to): diagnostic equipment, electrosurgery units (e.g., monopolar, bipolar, vessel sealing), patient positioning equipment, endoscopic instruments and equipment, positioning and stabilizing OR equipment, doppler, dermatome and mesher, robotics, and power equipment (e.g., drills, saws).

III. ADVANCED SCIENCE (46 items)

A. Advanced Anatomy and Physiology (36 items)

- 1. 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, and metastatic disease)

B. Advanced Principles Of Microbiology (5 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)

C. Surgical Pharmacology and Anesthesia (5 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. recognize signs and symptoms of drug reactions and interactions
 - d. 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.

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. McBurnev'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