

## Section Three

### (CFA) Examination

#### FIRST ASSISTANT CERTIFYING EXAMINATION CONTENT OUTLINE

The CFA examination is constructed based on the content outline, using questions from the first assistant item bank. The percentage assigned to each area of the content outline determines how many questions from that area appear on the examination. No two examinations are exactly alike even though the percentage of questions from each area are the same. The questions and test forms are reviewed by the eight member CFA Examination Review Committee (CFA-ERC).

The content of the examination is based on tasks performed by CFA's nationwide. A Job Analysis survey was conducted to identify the specific tasks related to the frequency, and importance of first assistants nationwide. The results of the Job Analysis were used to develop the content outline for the examination. The content outline is evaluated on a prescribed schedule to assure that the overall examination content reflects current first assistant practice.

The CFA examination consists of 200 questions, of which 175 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 must correctly answer 113 questions to pass the CFA examination. Score reports are provided to all candidates who take the examination.

The CFA examination is based on the Examination Content Outline developed from the 2008 Job Analysis.

#### **I. PERI-OPERATIVE CARE (55%)**

##### ***A. Pre-Operative Preparation (22%)***

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. Remove casts, splints, braces, and similar devices.
8. Transfer patient to operating room table.
9. Assemble and test positioning equipment.
10. Coordinate and participate in patient positioning.
11. Obtain and apply tourniquet.

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12. Perform pre-operative invasive procedures (e.g., urinary catheterization).
13. Prepare skin for surgery (e.g., hair removal, surgical preparation).
14. Don personal protective equipment.
15. Check package integrity of sterile supplies.
16. Open sterile supplies while maintaining aseptic technique.
17. Perform surgical hand scrub, gowning, and gloving.
18. Gown and glove sterile team members.
19. Verify identity of patient and operative site (time out).
20. Assemble and inspect specialty equipment for surgical procedures.
21. Coordinate and participate in the draping of the patient.
22. Specify methods of operative exposure (e.g., surgical incisions).
23. Accommodate for specific patient needs (e.g., pediatrics, psychological needs).
24. Discuss radiologic surgical techniques and safety.

### **B. Intra-Operative Procedures (26%)**

1. Provide assistance to the surgical team in the assessment and care of patient.
2. Facilitate the efficiency of the surgical procedure.
3. Pass instruments and supplies to surgeon during surgery.
4. Perform video recording and/or still photography or procedures (e.g., endoscopic).
5. Perform advanced intra-operative functions as directed.
6. Monitor and maintain aseptic technique throughout the procedure.
7. Verify medications and solutions at the sterile field.
8. Mix medications and solutions at the sterile field.
9. Calculate amount of medications and solutions used.
10. Monitor that supplies and solutions are adequate.
11. Verify and mark specimen(s).
12. Observe patients intra-operative status (e.g., monitor color of blood, onset of blood loss, monitor position of patient during procedure).
13. Operate specialty equipment during surgery.
14. Utilize the following specialty equipment:
  - a) ultrasound technology (e.g., harmonic scalpel, phacoemulsification)
  - b) endoscopic technology
15. Irrigate, suction, and sponge operative site.
16. Place and secure retractors and packing.
17. Clamp, tie, or cauterize vessels.
18. Operate internal stapling devices.
19. Request and verify suture materials.
20. Suture tissue.
21. Prepare drains, catheters, and tubing for insertion.
22. Insert, position, and secure drains, catheters, and tubing.
23. Apply skin staples.
24. Assist in the placement of closed wound drainage systems.
25. Prepare and apply sterile dressing.
26. Perform designated action during an emergency (e.g., CPR).

### **C. Post-Operative Procedures (7%)**

1. Dispose of contaminated sharps after surgery in compliance with Standard Precautions.

2. Dispose of contaminated waste after surgery.
3. Assist with room turnover.
4. Apply casts, splints, braces, and similar devices.
5. Transfer and transport patient to PACU.
6. Evaluate patient post-operatively and document findings (e.g., skin integrity).
7. Remove sutures or staples.
8. Change dressings.

## **II. ADDITIONAL DUTIES (10%)**

### **A. Administrative and Personnel (6%)**

1. Revise surgeon's preference card as necessary.
2. Utilize computer technology for:
  - a) communication
  - b) continuing education
3. Follow disaster plan protocol.
4. Recognize safety and environmental hazards (e.g., fire, chemical spill, laser smoke).
5. Apply ethical and legal practices related to surgical patient care.
6. Use interpersonal skills (e.g., listening, diplomacy, responsiveness) and group dynamics.
7. Understand the importance of cultural diversity.
8. Serve as technical subject matter expert to the surgical team.
9. Discuss legal and ethical aspects of surgery (e.g., surgical consents, limitations, negligence, patient rights).

### **B. Equipment Sterilization and Maintenance (4%)**

1. Operate sterilizing devices according to manuf. recommendations.
2. Troubleshoot equipment malfunctions.
3. Take malfunctioning equipment out of service.
4. Report malfunctioning equipment to proper personnel.

## **III. ADVANCED SCIENCE (35%)**

### **A. Anatomy and Physiology (20%)**

1. Apply advanced knowledge of surgical anatomy.
2. Apply advanced knowledge of pathophysiology and histology to the handling and manipulation of tissue for the following surgical pathologies:
  - a) abnormal anatomy
  - b) disease processes
  - c) fractures
  - d) malignancies

### **B. Advanced Principles Of Microbiology (9%)**

1. Apply advanced knowledge of microbiology to operative practice:
  - a) classification and pathogenesis of micro-organisms
  - b) factors influencing wound healing (e.g., condition of patient, infections process, wound type)
  - c) infection control procedures (e.g., aseptic technique)
  - d) principles of tissue handling (e.g., Halsted principles, tissue manipulation methods, traction/counter traction)
  - e) surgical wound classification/management

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#### ***C. Surgical Pharmacology and Anesthesia (6%)***

1. Apply advanced knowledge of pharmacology and anesthesiology to operative practice to:
  - a) the use of anesthesia methods to assist anesthesia providers
  - b) assist physician in treating pharmacological and/or anesthetic complications
  - c) handle and administer medications
  - d) identify situations in which blood and fluid replacement is needed
  - e) recognize signs and symptoms of drug reactions and interactions
2. Apply pain management concepts.

#### **CFA EXAMINATION RECOMMENDED REFERENCES**

The most current editions of the books listed below are used for reference by the NBSTSA and the CFA-ERC.

##### **REFERENCE**

Alexander's Care of the Patient in Surgery  
Berry and Kohn's Operating Room Technique  
Human Physiology  
Campbell's Operative Orthopedics  
Fundamentals of Surgery  
Grant's Atlas of Anatomy  
Physician's Desk Reference  
Principle's of Human Anatomy  
Schwartz's Principles of Surgery  
Surgical Technology Principles and Practice  
Taber's Cyclopedic Medical Dictionary  
Tools of the Trade and Rules of the Road  
Law and Ethics for Medical Careers  
Grays Anatomy: The Anatomical Basis of Clinical Practice  
The Ethicon Knot Tying Manual  
"[http://www.ruralareavet.org/PDF?Surgery-Knot\\_Tying.pdf](http://www.ruralareavet.org/PDF?Surgery-Knot_Tying.pdf)"

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