I. **Perioperative Care: 105 items**

A. **Preoperative Preparation: 29 items**
   1. Review surgeon’s preference card.
   2. Verify availability of surgery equipment (e.g., reserve equipment for surgery).
   3. Prepare and maintain operating room environment according to surgical procedure (e.g., temperature, lights, suction, and furniture).
   4. Utilize preoperative documentation (e.g., informed consent, advanced directives, allergies, laboratory results).
   5. Obtain and apply additional equipment (e.g., pneumatic tourniquet, sequential compression devices, thermoregulatory devices).
   6. Don personal protective equipment.
   7. Obtain instruments, supplies, and equipment and verify readiness for surgery.
   8. Check package integrity of sterile supplies.
   9. Open sterile supplies/instruments while maintaining aseptic technique.
  10. Perform surgical scrub (e.g., initial, waterless).
  11. Assemble, inspect, and set up sterile instruments and supplies for surgical procedures.
  12. Gown and glove sterile team members.
  13. Participate in “Time Out”.
  15. Transport patient to and from operating room utilizing correct patient positioning.
  16. Transfer patient to operating room table.
  17. Apply patient safety measures (e.g., safety strap, protective padding, x-ray safety).
  18. Apply patient monitoring devices.
  19. Position the patient.
  20. Prepare surgical site (e.g., hair removal, surgical preparation).
  21. Consider patient needs (e.g., pediatrics, immuno-compromised, patient allergies).
  22. Don gown and gloves.
  23. Perform medical hand wash.
24. Secure cords/tubing to drapes and apply light handles.
25. Drape specialty equipment (e.g., c-arm, Da Vinci, microscope).

**B. Intraoperative Procedures: 66 items**

1. Provide intra-operative assistance under the direction of the surgeon.
2. Perform counts with circulator at appropriate intervals.
3. Identify instruments by:
   a. function.
   b. application.
   c. classification.
4. Prepare bone and tissue grafts (e.g., allograft, autograft, synthetic).
5. Anticipate the steps of surgical procedures.
6. Differentiate among the various methods and applications of hemostasis (e.g., mechanical, thermal, chemical).
7. Specify methods of operative exposure.
8. Place and secure retractors.
9. Verify with surgeon the correct type and/or size of implantable devices.
11. Irrigate, suction, and sponge operative site.
12. Monitor and maintain aseptic technique throughout the procedure.
13. Assemble, test, and operate specialty equipment during surgery.
14. Utilize specialty equipment:
   a. microscopes.
   b. computer navigation systems.
   c. thermal ablation.
   d. robotic technology.
   e. laser technology (e.g., holium, argon, CO2 beam coagulators).
   f. ultrasound technology (e.g., harmonic scalpel, phacoemulsification).
   g. endoscopic technology.
   h. power equipment and fracture sets.
15. Verify, mix, and label all medications and solutions.
17. Follow Standard and Universal precautions.
18. Monitor medication and solution use.
19. Prepare drains, catheters, and tubing for insertion.
20. Verify, prepare, and label specimen(s).
21. Observe patient’s intra-operative status (e.g., monitor color of blood, blood loss, patient position).
22. Apply thermal surgical techniques and safety precautions (e.g., cryo-surgery, laser surgery, electrical surgery unit (ESU)).
23. Prepare suture materials.
24. Cut suture material as directed.
25. Identify appropriate usage of sutures/needles and stapling devices.
26. Provide assistance with stapling devices.
27. Perform appropriate actions during an emergency.
28. Initiate preventative actions in potentially hazardous situations.
29. Connect and activate drains to suction apparatus.
30. Prepare and apply sterile dressings.
31. Assist in the application of casts, splints, braces, and similar devices.

C. Postoperative Procedures: 10 items
1. Report abnormal post-operative findings (e.g., bleeding at surgical site, Hematoma, rash).
2. Transfer patient from operating table to stretcher.
3. Remove drapes and other equipment (e.g., suction, cautery, non-disposable items) from patient.
4. Perform room clean up after surgery.
5. Dispose of contaminated waste and drapes after surgery in compliance with Standard Precautions.
7. Report use of local anesthetic.
8. Complete terminal cleaning of operating room.
9. Transport laboratory specimens.
10. Participate in case debrief (e.g., following sentinel event).

II. Additional Duties: 20 items

A. Administrative and Personnel: 10 items
1. Revise surgeon’s preference card as necessary.
2. Utilize computer technology for:
   a. surgeon’s preference cards.
   b. interdepartmental communication.
   c. continuing education.
   d. research.
3. Follow hospital and national disaster plan protocol (e.g., safety drills, mass casualty drills, biologic hazard).
4. Recognize safety and environmental hazards (e.g., fire, chemical spill, laser, smoke).
5. Follow proper cost containment processes.
6. Apply ethical and legal practices related to surgical patient care.
7. Use interpersonal skills (e.g., listening, diplomacy, responsiveness) and group dynamics.
8. Understand the importance of cultural diversity.
9. Serve as preceptor to perioperative personnel.
10. Understand concepts of death and dying.
11. Participate in organ and tissue procurement.
12. Understand basic principles of electricity and electrical safety.

B. Equipment Sterilization and Maintenance: 10 items
1. Operate cleaning and sterilizing devices (e.g., ultrasonic washers, autoclave, cart washer).
2. Troubleshoot equipment malfunctions.
3. Decontaminate and clean instruments and equipment.
4. Inspect, test, and assemble instruments and equipment.
5. Package and sterilize instruments and equipment.
6. Perform quality assurance functions (e.g., biological monitoring of sterilization methods).
7. Maintain equipment records and logs (e.g., Sterrad, biological, laser log, sterilizers).
8. Sterilize instruments for immediate use (e.g., short cycle).

III. Basic Science: 50 items

A. Anatomy and Physiology: 30 items
1. Use appropriate medical terminology and abbreviations.
2. Demonstrate knowledge of anatomical systems as they relate to the surgical procedure:
   a. cardiovascular.
   b. gastrointestinal.
   c. endocrine.
   d. integumentary.
   e. lymphatic.
   f. muscular.
   g. neurological.
   h. peripheral vascular.
   i. reproductive.
   j. pulmonary.
   k. otorhinolaryngology.
   l. skeletal.
   m. genitourinary.
   n. ophthalmic.
3. Demonstrate knowledge of human physiology as they relate to the surgical procedure:
   a. cardiovascular.
   b. gastrointestinal.
   c. endocrine.
   d. integumentary.
   e. lymphatic.
f. muscular.
g. neurological.
h. peripheral vascular.
i. reproductive.
j. pulmonary.
k. otorhinolaryngology.
l. skeletal.
m. genitourinary.
n. ophthalmic.

4. Identify the following surgical pathologies:
   a. abnormal anatomy.
   b. disease processes.
   c. traumatic injuries.
   d. malignancies.

B. **Microbiology: 10 items**
   1. Apply principles of surgical microbiology to operative practice:
      a. classification and pathogenesis of microorganisms.
      b. infection control procedures (e.g., aseptic technique).
      c. principles of tissue handling (e.g., Halsted principles, tissue manipulation methods, traction/counter traction).
      d. stages of, and factors influencing wound healing (e.g., condition of patient, wound type).
      e. surgical wound classification.
   2. Identify and address factors that can influence an infectious process.

C. **Surgical Pharmacology: 10 items**
   1. Apply principles of surgical pharmacology to operative practice:
      a. anesthesia related agents and medications.
      b. blood and fluid replacement.
      c. complications from drug interactions (e.g., malignant hyperthermia).
      d. methods of anesthesia administration (e.g., general, local, block).
      e. types, uses, action, and interactions of drugs and solution (e.g., hemostatic agents, antibiotics, IV solutions).
      f. weights, measures, and conversions.
   2. Maintain awareness of maximum dosage.

*Effective Date: 8-1-12*