

# ASSOCIATION OF SURGICAL TECHNOLOGISTS

## *SURGICAL TECHNOLOGIST CERTIFYING EXAM STUDY GUIDE, 3<sup>RD</sup> Ed.*

### **PRACTICE EXAM #3: EXPLANATIONS WITH REFERENCES**

#### **Reference Key**

##### **Alex**

Rothrock, J. C. (2011). *Alexander's care of the patient in surgery*. (14<sup>th</sup> ed.). St. Louis: Elsevier

##### **Anatomy**

Tortora, G., & Nielsen, M. T. (2009). *Principles of human anatomy* (11<sup>th</sup> ed.). Hoboken, NJ: John Wiley & Sons

##### **B&K**

Phillips, N. (2013). *Berry & Kohn's operating room technique* (12<sup>th</sup> ed.). St. Louis: Elsevier.

##### **Med Term**

Gyls, B. A., & Wedding, M. E. (2009). *Medical terminology systems: A body systems approach* (6<sup>th</sup> ed.). Philadelphia: F.A. Davis.

##### **Memmler's**

Cohen, B. J., & Taylor, J. J. (2009). *Memmler's the human body in health and disease* (11<sup>th</sup> ed.). Philadelphia: Lippincott Williams & Wilkins.

##### **Micro**

Price, P., & Frey, K. B. (2003). *Microbiology for surgical technologists*. Clifton Park, NY: Delmar Learning.

##### **OR Instr**

Tighe, S. M. (2007). *Instrumentation for the operating room* (7<sup>th</sup> ed.). St. Louis: Mosby.

##### **Pharm**

Snyder, K. C., & Keegan, C. (2006). *Pharmacology for the surgical technologist* (2<sup>nd</sup> ed.). St. Louis: Saunders.

##### **Physiology**

Rhoades, R., & Pflanzner, R. (2003). *Human physiology* (4<sup>th</sup> ed.). Pacific Grove, CA: Brooks/Cole.

## **ST for ST**

Frey, K. B., & Ross, T. (Eds.). (2014). *Surgical technology for the surgical technologist: A positive care approach* (4<sup>th</sup> ed.). Clifton Park, NY: Delmar Cengage Learning.

1. B. Trigeminal neuralgia arises from the irritation of the fifth cranial nerve. (Memmler's 229)
2. D. Sterile mineral oil is used to lubricate the skin at the donor site to reduce friction and provide a smooth surface for the dermatome. (ST for ST 735 )
3. A. Donor site first is an example of proper sterile technique when performing skin prep for a split-thickness skin graft. (ST for ST 734 )
4. B. The intra-abdominal pressure of the carbon dioxide should be maintained between 12-15 mm Hg to avoid damage to the abdomen; however, it should not be allowed to go below 8 mm Hg. (ST for ST 548 )
5. A. Strabismus is the inability to direct both eyes at the same object due to the lack of coordination of the extraocular muscles. (ST for ST 608 )
6. D. Indications for a carotid endarterectomy include transient cerebral ischemia, asymptomatic bruits, and chronic cerebral ischemia. (ST for ST 1110 )
7. B. According to the Rule of Nines, the percentage assigned to the front and back of the trunk of the body is 18%. (ST for ST 732-733 )
8. C. An abnormal increase in the number of cells due to an increase in the frequency of cell division is known as hyperplasia. (Physiology 941)
9. A. During second intention healing, granulation tissue containing fibroblasts forms in the wound and closes it by contraction with secondary growth of epithelium. (ST for ST 293 )
10. A. Lidocaine hydrochloride, trade name Xylocaine, is used as an emergency medication during surgery to treat cardiac arrest or ventricular tachycardia or fibrillation. (ST for ST 214 )
11. C. One fluid ounce equals 30 mL; two ounces equals 60 mL. (Pharm 209 )
12. D. Covering a sterile table for later use is not permitted because it is nearly impossible to uncover without contaminating the sterile items on the top of the table; additionally, uncovering the table stirs up the dust in the O.R. (ST for ST 172 )

13. C. Hypovolemia is low blood volume. Patients are placed in the Trendelenburg position to increase blood flow to the upper body. (ST for ST 362 )
14. B. The use of monofilament suture swaged on a needle is best for minimizing tissue trauma and drag. (ST for ST 307 ).
15. C. Occupational Safety and Health Administration (OSHA) is an organization that is dedicated to protecting the health of workers by establishing standards that address issues related to safety in the work place. (ST for ST 25, 85 )
16. D. Physiological and survival is the most applicable to the surgical patient. (ST for ST 49 -50 )
17. D. The gown is removed first by grasping it near the shoulders and pulling it off. The circulator aids the effort by untying the back of the gown. This action slightly turns the inside of the gloves outward to aid in removing them without touching any patient blood or body fluids that are on the outside of the gloves. (ST for ST 391, 392 )
18. C. A laparoscopy combination drape is a combination of laparotomy and perineal sheet. It is used for abdominoperineal resection. (B&K 520 )
19. D. The thermal (steam) destruction of microbes is due to the denaturation and coagulation of cellular protein. (ST for ST 162 )
20. C. Drapes are to be carried to the O.R. table in folded condition. If allowed to unfold it could drag on the floor contaminating the drapes. The drapes are too large to place on the patient in an unfolded manner without contaminating them. (ST for ST 375-377 )
21. D. The pulse oximeter cannot properly function with nail polish present. The light beam from the pulse oximeter is focused to travel through the nail and skin of the finger and nail polish changes the color of the light beam causing it to malfunction. (ST for ST 325 )
22. A. Studies have shown that air exchange in the O.R. at the rate of 15 – 20 times per hour helps to reduce the microbial count. (ST for ST 83 )
23. B. 10 mL of water is necessary to inflate a 5-mL balloon on the Foley indwelling catheter. (ST for ST 358 )
24. D. Fine scissors coated with water-soluble gel is used for trimming eyelashes. (ST for ST 599 )
25. A. When performing the patient skin prep, the skin should be scrubbed and painted starting at the incision site using a circular motion. (ST for ST 372 )

26. C. The percentage or ratio of erythrocytes that is present in the whole blood of the surgical patient is determined by the laboratory test called the hematocrit. (Memmlers 292)
27. B. If a sponge pack contains an incorrect number of sponges, the first scrub surgical technologist should hand the sponges to the circulator who will place the sponges in an area of the O.R. where they will not be thrown away or mixed with other sponges until the end of the procedure and the O.R. is being cleaned (ST for ST 344 )
28. B. Any type of stones, salivary, gallbladder or renal, should be sent dry to pathology. Preservative solutions destroy the stones, making it impossible for pathological examination. (ST for ST 406 )
29. D. The first scrub should begin at the operative field first and work her/his way “backwards” – operative field, Mayo stand, back table, sponge bucket, floor. ( ST or ST 387 )
30. B. Coude is a non-retaining catheter tip to maneuver around n obstruction if a patient has a urethral stricture. (ST for ST 285 )
31. A. Bolster dressing also referred to as stent dressings are for wounds that are difficult to dress and keep in place, such as the face and neck. The long ends of sutures are tied over the dressing to keep it in place. (ST for ST 284 )
32. B. Nerve stimulators create very small electric currents that help to identify and preserve essential facial nerves. (ST for ST 277 )
33. D. Absorbable collagen is contraindicated in the presence of infection or in areas where blood or other body fluids have pooled. (B&K 581)
34. D. To achieve proper wound closure, the table must be straightened to bring the tissue of the incision closer together and avoid tension on the suture and tissues. (Alex 156)
35. A. A fiberoptic light source is the power source for all fiberoptic instruments and equipment and should be tested prior to the use of a fiberoptic bronchoscope. (ST for ST 274 )
36. B. Coarctation of the aorta can be corrected by excision of a constricted segment of the aorta with reanastomosis. (ST for ST 1082-1085 )
37. B. An endoscopic retrograde cholangiopancreatography (ERCP) is performed to visualize the biliary and pancreatic tract so the patient would have the diagnosis of choledocholithiasis. (Alex 363)

38. B. The high ligation of the gonadal veins of the testes done to reduce venous plexus congestion is varicocelelectomy. (B&K 744 )
39. A. Surgical trauma to the first and second cranial nerves would cause loss of the sense of smell and sight. (ST for ST 1149 )
40. A. Culdocentesis is a diagnostic procedure performed for suspected ectopic pregnancy, intraoperitoneal bleeding or tuboovarian abscess. It involves the aspiration of blood, fluid or pus by needle via the posterior vaginal fornix. (B&K 701)
41. B. Glaucoma can be surgically treated by performing a goniotomy, iridectomy, or cyclodialysis. (ST for ST 603-606)
42. A. Arch bar application is used to immobilize the jaw following a mandibular fracture. (ST for ST 709-713 )
43. A. An abduction splint is used to immobilize and keep in alignment the hip joint following a total hip arthroplasty. (ST for ST 951 )
44. B. Untreated acute otitis media can lead to mastoiditis. (ST for ST 641 )
45. D. A Doppler ultrasound device is used intraoperatively to assess vascular patency. (ST for ST 1096 )
46. B. The Hurd dissector and Pillar retractor is used during a tonsillectomy. (ST for ST 676=677 )
47. A. The primary source of energy to the body is carbohydrates acquired through the ingestion of carbohydrate-rich foods and liquids. (Physiology 196)
48. D. Sellick's maneuver or cricoid pressure is used to prevent aspiration during induction and ET tube placement. (ST for ST 233 )
49. C. Metastasis is the spread of cancerous cells to other parts of the body. (Memmler's 70)
50. C. The pharynx is a passageway for air and food. (Anatomy 757)
51. B. The epididymis is a comma-shaped organ that lies along the posterior border of the testis. (Anatomy 852)
52. A. The valve between the left atrium and left ventricle is referred to as either the mitral or bicuspid valve. (Anatomy 462)

53. C. An amphiarthrosis refers to a joint that is slightly movable such as the symphysis pubis. (ST for ST 894 )
54. A. Calcium is the most abundant ion in the body. (Physiology 808)
55. C. Spore formation happens when environmental conditions are not conducive to growth and viability. (ST for ST 131 )
56. C. The pancreas regulates the concentration of sugar glucose levels in the circulatory system. When the concentration of blood glucose increases, the pancreas senses the change and releases insulin, causing the glucose to move from the blood and be stored in the liver and muscles. When the blood level of glucose is too low, the pancreas releases glucagon that causes stored glucose to be released into the circulator system. (ST for ST 482 )
57. D. When moisture soaks through a drape, gown or package, “strike-through” occurs and the item is contaminated. (ST for ST 141 )
58. B. A Swan Ganz monitoring device is inserted within a branch of the pulmonary artery to measure the central venous pressure, pulmonary artery pressure, pulmonary capillary wedge pressure and cardiac output. (Pharm 302)
59. A.  $30 \text{ (mL)} \times .5 \text{ (\%)} = 60 \text{ (mL)} \times X \text{ (\%)}$  (Pharm 74)
- $$\frac{60 \text{ mL}}{30 \text{ L}} = \frac{.5\%}{X} \quad 30 \times .5 = 60 \times X \quad 15 = 60X \quad \frac{15}{60} = \frac{60X}{60} \quad X = 0.25$$
60. B. If a patient has withdrawn the surgical informed consent prior to surgery, then do not transport patient and inform the surgeon. (ST for ST 32-34 )
61. D. Cross-contamination is the contamination of an individual or object upon contact with a contaminated item. (ST for ST 140 )
62. B. The inside of wrappers is considered sterile except for the one-inch border/perimeter around the outside edge of the wrapper. (ST for ST 172 )
63. A. Antiseptic agents are used to perform the patient skin prep as well as used by surgical team members to perform the surgical scrub; the agents are used to “surgically clean” the skin. (ST for ST 140 )
64. D. Do not transport; inform unit supervisor, and O.R. personnel if there is a discrepancy in the identification of a patient on the nursing unit. (ST for ST 348-349 )

65. A. Studies have shown patients that were asked to shower with antimicrobial soap at home prior to having surgery demonstrate a decrease in the microbial count on the skin. (ST for ST 325)
66. D. Before donning the sterile gown and gloves, the sterile members of the O.R. team must perform the surgical scrub with a chemical antiseptic. (ST for ST 332 )
67. A. For prepping a Bartholin's cystectomy the anus is prepped last. (ST for ST 374-375; 551 )
68. C. To avoid contamination and reaching over the non-sterile surface when draping a table, the drape should be placed front to back. (ST for ST 330 )
69. A. If the arm is placed on the arm board at greater than 90 degrees the brachial plexus is at risk for injury. (ST for ST 361; 362; 363 )
70. B. The third lumen of the three-way indwelling Foley catheter is used for purposes of instilling irrigating fluids into the bladder. (ST for ST 285 )
71. C. Operating microscope enlarges and illuminates the surgical field. (ST for ST 276 )
72. D. Cottonoids are small radiopaque surgical patties used during cranial procedures. (ST for ST 281 )
73. B. Avitene® is a type of collagen material which must be kept dry or it becomes very sticky and difficult to handle. (ST for ST 228 )
74. C. Phacoemulsification machine uses ultrasonic energy to fragment the lens while it irrigates and aspirates the fragments in ophthalmology surgery. (ST for ST 622 )
75. D. Carbon dioxide lasers would be contraindicated for the use in the posterior chamber of the eye because the laser beam cannot travel through clear fluids. (ST for ST 115-116)
76. A. The endocardial electrode is placed in the right ventricle or atrium. (B&K 941-942 )
77. D. To relieve pain caused by chronic alcoholic pancreatitis and pseudocysts of the pancreas, a pancreaticojunostomy may be performed. (B&K 673)
78. C. Bookwalter self-retaining retractor may be used for a retropubic prostatectomy. (Alex 527)
79. B. Ménière's disease is associated with cranial nerve VIII. (Alex 834-835 )

80. C. Brachytherapy is used in the treatment of cervical cancer. (B&K 114; 405)
81. A. Radial keratotomy is a procedure performed to improve vision for patients with myopia. (B&K 827)
82. C. LeFort I fracture is a type of midfacial fracture in which the maxilla is separated from the base of the skull and the upper jaw can be free floating. (ST for ST 719 )
83. B. Bennett retractors are frequently used in various types of orthopedic procedures. (ST for ST 909 )
84. A. Caldwell-Luc procedure involves an incision into the canine fossa of the upper jaw. (ST for ST 666 )
85. C. A Doppler device measures the movement of blood through a vessel using ultrasonic, high-frequency waves. (ST for ST 403; 1096 )
86. D. The Castroviejo needle holders are a type of microsurgical instrument that is used during delicate cardiothoracic and vascular procedures, and neurosurgery. (ST for ST 270; 597)
87. B. The chemical reactions that break down complex organic compounds into simple ones are known as catabolism. (Anatomy 178)
88. A. The semicircular canals work to maintain the equilibrium of the body. (Anatomy 719).
89. C. The first step in the production of urine is called glomerular filtration. (Physiology 736)
90. B. The elevated adipose tissue over the symphysis is called the mons pubis. (Anatomy 873).
91. D. The vagus cranial nerve (X) regulates the secretion of gastric juices. (Anatomy 647)
92. B. Phagocytosis by the white blood cells is an example of the body's second line of defense. (Physiology 858-861 )
93. A. When opening a sterile wrapper, the unsterile person should open the corner farthest from the body first. The unsterile person must avoid reaching over a sterile field. (ST for ST 172 ).
94. C. Polyester fiber mesh is the least inert of the synthetic meshes. (B&K 572)



95. B. Renograffin is used when a patient is allergic to iodine. (Alex 477)
96. A. If a non-English speaking patient signs a surgical informed consent in English and does not fully understand it, assault and battery would apply to the situation. (ST for ST 32-34 )
97. C. A fear that most pediatric patients experience is anxiety due to impending separation from the parents. (ST for ST 54 )
98. B. The scrub person should remain sterile and maintain the sterility of the back table until the patient has left the O.R. If any complications should occur in the immediate postoperative period in the O.R. the scrub person is prepared to assist. (ST for ST 389 )
99. D. The dirty instruments should be placed in a basin of water for transport to the decontamination room. Saline will damage the coating on the instruments. The instruments should not be transferred dry to the decontamination room allowing the debris to dry making it difficult to clean. (ST for ST 148-149; 393 )
100. A. Instruments that are unwrapped with no lumens can be sterilized at 270 degrees F for 3 minutes. (ST for ST 161 )
101. C. If a shave is ordered, studies show that the best method is to use clippers with disposable heads to try to prevent cutting or nicking the skin. (ST for ST 325 )
102. D. Certain information and results of tests should be found in the patient's chart such as lab results, radiology reports, consent form for surgery, previous pathology reports, history and physical reports, allergies, handicaps or other limitations. (ST for ST 323-324 )
103. A. Upon admission to the facility the identification bracelet is placed on the surgical patient. (ST for ST 348 )
104. D. To allow the individual transporting the patient the ability to control the stretcher and the patient facing in a normal position, the patient is to be transported feet first at all times. (ST for ST 349 )
105. A. After the tourniquet has been inflated the leg may be lowered when draping for a knee arthroscopy. (B&K 529)
106. B. The iris regulates the amount of light entering the eye and assists in obtaining a clear image. (Anatomy 709)
107. C. The glomerulus is a capillary network of blood vessels within the renal cortex that functions as a filter. (Anatomy 829)

108. D. Since the kidneys are located behind the peritoneal lining of the abdominal cavity, they are retroperitoneal organs. (Anatomy 824)
109. A. Sodium is the most abundant extracellular ion necessary for the transmission of impulses. (Physiology 221-222)
110. B. Deciduous teeth (baby teeth) erupt at about 6 months of age and are lost usually between 6 and 12 years of age. (Memmler's 412)
111. C. Thiopental sodium (Pentothal) is a commonly used induction drug. (Pharm 340)
112. The celiac, mesenteric, and common carotid arteries arise directly from the aorta. (Anatomy 498)
113. D. To be considered sterile an item must be completely submerged in glutaraldehyde for 10 hours. (ST for ST 143 )
114. A. Antigens are chemical substances that react with the body and cause the formation of antibodies. (Physiology 850 )
115. A. Myringotomy is an incision into the tympanic membrane in order to suction the infectious fluids and place PE tubes. This is performed for the treatment of chronic acute otitis media. (ST for ST 634-637 )
116. C. The patient is placed in the supine position with the knees placed at the lower break of the O.R. table. The end of the O.R. table is lowered to facilitate moving the operative leg during the arthroscopy. (ST for ST 961 )
117. B. A craniotomy approach is often used for frontal sinus repair requiring the use of craniotomy instruments. (B&K 884 )
118. D. The placement of a collar suture at the internal cervical os to prevent spontaneous abortion is called a Shirodkar procedure. Another term for the procedure is cerclage and involves the placement of a polyester (Mersilene) tape around the internal os and tied. (ST for ST 522-524 )
119. C. The resectoscope is a combination of a cutting instrument and an endoscope. The surgeon utilizes a loop electrode that excises the prostatic tissue and the endoscope provides visualization of the prostate. (ST for ST 815; 856-861)
120. A. Several types of devices can be used to hyperextend the neck such as a shoulder roll or interscapular pillow. (ST for ST 501 )

121. C. A Tru-Cut biopsy needle would be used for obtaining a liver tissue biopsy. (ST for ST 310 )
122. B. Cardioplegia is used during some open heart procedures to arrest the heart and allow the surgeon the ability to perform the procedure. (Alex 1006)
123. A. Tissue necrosis can occur if the tourniquet is inflated for a prolonged period of time. (B&K 552)
124. D. The cryotherapy unit uses liquid nitrogen to deliver extreme cold through an insulated probe to the diseased tissue without damaging the adjacent tissues and is often used to repair retinal detachments. (ST for ST 277 )
125. C. The umbilicus is prepped last or separately since it is considered a contaminated area. (B&K 517)
126. B. An axillary roll is placed for lateral positioning to facilitate respiration. (ST for ST 369 )
127. D. The peroneal nerve innervates the lateral surface of the lower leg and dorsal surface of the foot. The straps of the stirrups that hold the foot in place that are improperly placed or inadequately padded can cause undue pressure on the nerve causing temporary or permanent damage. (ST for ST 366 )
128. A. Formalin or normal saline will alter the tissue that is indicated for frozen sections. Therefore, the tissue must be sent in a container with no preservative. (ST for ST 406 )
129. C. For a nephrectomy, the patient is positioned in the lateral position, non-operative site down. (ST for ST 828 )
130. D. The biological indicator for steam sterilization contains the *G. stearothermophilus* spore; it is harmless to humans, but is highly resistant to destruction by steam sterilization. (ST for ST 166 )
131. B. Hemopoiesis is the process by which blood cells are formed. (Anatomy 141, 442)
132. A. The sinoatrial (SA) node establishes the rhythm of the heart. (Anatomy 471)
133. C. The cerebral cortex, where thought processes occur, is located on the surface of the cerebrum and contains billions of neurons. (Anatomy 630)

134. D. Kantrex, bacitracin and Ansef are antibiotics that are mixed with saline irrigation for purposes of irrigating the surgical wound to prevent a surgical site infection. (Pharm 147)
135. A. Gravity displacement sterilizers have four cycles: condition, exposure, exhaust and dry. (ST for ST 163 )
136. B. 14 Fr. Robinson should be used prior to a D & C. (ST for ST 285 )
137. A. HEPA filters are used in the O.R. due to the ability to remove bacteria as small as 0.5-5 mm. (ST for ST 82-83 )
138. C. An anesthetized patient should be moved slowly to allow the cardiovascular system to adjust due to the preoperative and intraoperative drugs the patient has received that affect the system. (ST for ST 359 )
139. D. The valves within the lumen of the saphenous vein can prevent the flow of blood; therefore, the vein must be reversed when used during a CABG. (Anatomy 483, 487-488)
140. B. Scoville brain spatula is a hand-held neurosurgical retractor. (ST for ST 1140)
141. A. For zygomaticomaxillary and zygomaticofrontal suture fractures, the incision is placed below the lower eyelid. (Alex 916 )
142. D. Testosterone is the principal male hormone produced in the testes and responsible for sexual characteristics. (Anatomy 929)
143. C. Staples must not be used to seal a peel pack; the staples create small holes that create an opening for microbes to enter. (ST for ST 156 )
144. B. 3-way Foley may be placed following a TURP. (ST for ST 857; 861 )
145. B. For closed-gloving the hand must not extend beyond cuffs. (ST for ST 337; 339 )
146. D. A Jackson-Pratt drain is preferred for a radical neck dissection when a moderate amount of drainage is expected. (ST for ST 692 )
147. C. The iliac arteries are formed by the bifurcation of the abdominal aorta. (Anatomy 503)
148. A. The basic unit of the nervous system is the neuron. (Anatomy 571)

149. B. The sterilization time for an item(s) is established by consulting the manufacturer's recommendations. (ST for ST 161 )
150. D. Dental implants is a series of treatment that results in a placement of a prosthetic tooth. (B&K 888 )
151. C. The four factors that are important to the steam sterilization process to ensure all microbes are destroyed are temperature, pressure, moisture and air. (ST for ST 162 )
152. D. The inner layer of the uterus is the endometrium; the outer layer is the perimetrium and the middle layer is the myometrium. (Anatomy 870).
153. B. Steam sterilization is the most economical and least expensive method of sterilization. (ST for ST 161 )
154. D. The basic functional unit of the body that makes up tissues and organs is the cell. (Anatomy 4)
155. C. The hard and soft palates form the roof of the mouth. (Anatomy 788)
156. B. Postoperatively a patient is placed in lateral position to prevent postoperative aspiration of blood and venous engorgement. (ST for ST 677 )
157. A. Steroids are a type of drug that reduce tissue inflammation and swelling. (Pharm 232)
158. D. When added to a local anesthetic epinephrine prolongs the anesthetic effect since it is a vasoconstrictor. (Pharm 230)
159. B. The destruction of microbes including spores can be accomplished with steam under pressure, chemical agents such as ethylene oxide, electron bombardment or ultraviolet radiation. (ST for ST 160 )
160. A. A prostatic needle biopsy is a diagnostic procedure performed when prostatic cancer is suspected. (B&K 499)
161. D. The steam biological indicator that was put through the steam sterilization process is incubated for 24 hours before the reading is recorded. (ST for ST 166 )
162. C. The saphenous vein is flushed with heparinized saline to identify branches that may have been missed. (ST for ST 1048-1049 )
163. A. Gigli saw is used during a craniotomy. It is included in a basic neurologic instrument set. (ST for ST 1138; 1152 )

164. D. Low level disinfecting agents kills most bacteria, fungi and viruses, but they are not effective in destroying spores and *M. tuberculosis*. (ST for ST 142 )
165. B. Polymethyl methacrylate, also known as bone cement, is used for total joint arthroplasty performed on the knee and hip. (ST for ST 914 )
166. C. Dry heat is a type of sterilization process used for sterilizing oils, powders and petroleum gauze that will be used in surgery. (B&K 315-316)
167. A. The pneumoperitoneum is established by inserting a Verres needle and tubing from the needle is attached to the insufflator for the instillation of carbon dioxide. (B&K 704-705)
168. D. Phacoemulsification uses ultrasonic energy to fragment the lens, while irrigating and aspirating the fragments. (Alex 615)
169. C. Fine hooks available in varying angles are essential dissecting instruments to perform a stapedectomy. (ST for ST 644-645 )
170. C. Incisions commonly used for splenectomy include left subcostal and upper midline. (ST for ST 489 )
171. D. When performing a resection for the correction of strabismus, a portion of the lateral rectus muscle is excised and the two ends reanastomosed. (ST for ST 608-610 )
172. A. The iliac crest, the superior portion of the ilium that flares outward, is an excellent source of cancellous and cortical bone for grafting purposes. (ST for ST 708 )
173. C. Glycine is a non-electrolytic and isotonic solution that is used during a TURP; since it is non-electrolytic it can be used in conjunction with the resectoscope. (ST for ST 858 )
174. B. The Eustachian tube connects the middle ear with the nasopharynx of the throat. It ensures that the eardrum vibrates freely when struck by sound waves. (Anatomy 712)
175. D. Ventriculoperitoneal shunt is a procedure that may require the use of a manometer to keep track of the intraoperative CSF pressure. (Alex 1109)