

Practice Test 1

Answers

Certification review Exam-2

1. Smith's
2. Fifth metacarpal (boxers fracture)
3. Lisfranc
4. soleus
5. superior lateral geniculate artery
6. Femur
7. Subclavian vein
8. Bankart
9. SLAP
10. radial
11. hyaloid canal
12. sinoatrial node
13. common hepatic duct and cystic duct.
14. cecum
15. cecum
16. storage of bile
17. duodenum
18. the ampulla of Vater
19. The P wave displays atrial depolarization
20. After the ventricles depolarize, they begin their repolarization phase, which results in another wave on the EKG. The T wave is indicative of ventricular repolarization
21. The R wave is indicative of ventricular depolarization and thus *should* correspond to the patient's pulse.
22. The skin is incised in the direction of the fibers of the external abdominal oblique; this incision is carried through the superficial fascia until the fibers of the external oblique aponeurosis are seen. The latter is divided and separated from the underlying internal oblique; a distinct plane exists between these 2 muscles. The freed edges of the external oblique aponeurosis are retracted, and the horizontal fibers of the internal oblique muscle are exposed. The transversus abdominis muscle and the internal oblique have fibers which run in almost the same direction in this area; the line between these 2 muscles is not too distinct. As soon as the transversalis fascia is exposed it is incised in the direction of the internal oblique opening. This exposes the preperitoneal fat and the peritoneum; these are incised, usually this incision is closed in 3 layers: the first including the peritoneum and transversalis fascia; the second, the aponeurosis of the external oblique, and the third closes the skin. Some surgeons prefer to put a few approximating sutures in the internal oblique and the transversus muscles.
23. a. 1. Skin 2. Superficial fascia (Camper's layer) 3. Superficial fascia (Scarpa's layer) 4. External oblique muscle 5. Internal oblique muscle 6. Transversus abdominis muscle 7. Transversalis fascia 8. Preperitoneal fat 9. Peritoneum

24. Hesslebach's Triangle: region that is medial to Deep epigastric vessels, inferiorly to the inguinal ligament and to the rectus medially. Hernias that occur here are direct. Indirect hernias occur lateral to the deep epigastric arteries.

25. Both direct and indirect hernias are the result of tears in the Transversalis fascia.

26. The Iliohypogastric and ilioinguinal nerves must be identified.

27. Pantaloon- when both hernias are present. Richter's hernia- strangulated
Maydl's- hernia that contains two loops of bowel

28 and 29. In laparoscopic hernia repair stapes should not be placed below the lateral iliopubic tract because of the genitofemoral nerve and the lateral femoral cutaneous nerve in this region. Stapling is also avoided in the triangular area inferior to the internal inguinal ring, called the triangle of doom. The triangle is bordered by the ductus deferens medially and the spermatic vessels laterally in the male.

The apex of the triangle is at the level of the internal inguinal ring. Located between the ductus deferens and the spermatic vessels are the external iliac artery and vein and the femoral nerve. The obturator artery is located medial to the triangle of doom but should also be avoided when securing the mesh to the Cooper ligament.

30. The heart wall contains three layers: the epicardium (the visceral pericardium), the myocardium (muscular wall of the heart), and the endocardium (the epithelium covering the inner surfaces of the heart)

31. The azygos vein is a major tributary of the Superior vena cava. It drains the right side of the vertebral column. The azygos receives blood from the smaller hemiazygos vein. The azygos and hemiazygos are the chief collecting vessels of the thorax.

32. Blood leaving the right ventricle enters the pulmonary trunk after passing through the pulmonary semilunar valve. The pulmonary trunk divides to form the left and right pulmonary arteries.

33. The right ventricle has thin walls and develops low pressure when pumping into the pulmonary circuit to and from the adjacent lungs. Functionally, low pressure is necessary because the pulmonary capillaries at the gas-exchange surfaces of the lungs are very delicate. The left ventricle has a thick wall because it pumps blood throughout the systemic circuit.

34. The coronary arteries originate at the base of the ascending aorta, (sinuses of Valsalva), and each gives rise to two branches. The right coronary artery gives rise to both a right marginal artery and a posterior interventricular artery.

35. The left coronary artery gives rise to both a circumflex artery and a left marginal artery.

36. **trochlea and the capitellum**

37. **The pronator teres muscle is the important landmark** in fractures of the forearm. It is located a little above the middle of the radius, and it must be determined whether the fracture is above or below its insertion. In a fracture of the radius *above* the insertion of the pronator teres, the upper fragment of the radius is pulled into supination by the supinator brevis and the biceps; the lower fragment is fully pronated. In such a fracture the biceps also will accomplish some flexion of the proximal fragment. In fractures *below* the attachment of the pronator teres, the supinator brevis and the pronator teres will equalize each other between pronation and supination in the upper fragment, and the

lower fragment will be in full pronation. The correct position for a radius fractured above the insertion of the pronator teres is with the elbow flexed and the hand supinated. In fractures below the pronator teres, the thumb up (midprone) position is used with flexion at the elbow. In this position the palm of the hand faces the chest. The important rule in all fractures of the radius above the position of a Colles' fracture is to keep the elbow flexed.

38. Colles' fracture involves the lower end of the radius; it is nearly transverse and within 1 inch of the articular surface of the bone. It produces a deformity due to dorsal displacement of the distal fragment and volar displacement of the proximal. Usually it is due to a fall on the extended hand

39. A reverse Colles' fracture is called Smith's fracture. This usually is produced by a fall on the back of the hand with the wrist flexed.

40. The navicular is the most commonly fractured of all the carpals. The scaphoid is the carpal bone which is dislocated most frequently. The scaphoid, the lunate and the triquetral bones form the carpal articular surface in the radiocarpal joint.

41. fifth metacarpal

42. Dupuytren's contracture is a contracture of the Palmer fascia.

43. De Quervain's disorders or compression of abductor pollicis longus and extensor pollicis brevis tendon near radial styloid process.

44. The Liver is covered by Glisson's capsule.

45. Sphincter of Oddi is located in the Ampulla Vater.

46. Kupffer's cells are the phagocytic cells of liver.

47. The junction of the superior mesenteric and splenic veins forms the portal vein.

48. duodenojejunal flexure is fixed by the so-called muscle or ligament of Treitz.

49. The cecum, ascending colon, hepatic flexure, and proximal portion of the transverse colon receive arterial blood supply from the superior mesenteric artery via the ileocolic, right colic, and middle colic arteries.

50. The inferior mesenteric artery supplies blood to the distal transverse colon, splenic flexure, descending colon, and sigmoid via the left colic artery and branches of the sigmoid and superior hemorrhoidal vessels.

51. nerves of Latarjet

52. The Sternum is made-up of the **Manubrium, body and Xiphoid process.**

53. 3

54. (A) A stone may lodge in a renal calyx and continue to enlarge, eventually filling the entire renal collecting system. It is known as a staghorn stone

55. (A) For simple observation cystoscopy or retrograde pyelogram, sterile distilled water may be used.

56. (D) A nephrostomy temporarily drains the kidney with a Malecot or Pezzar catheter. In an ile conduit, the ureter is implanted into the ileum and an ileal stoma is created. The ureter diverted to the skin of the lower abdomen is a cutaneous ureterostomy. Repositioning the ureter is a ureterocystostomy.

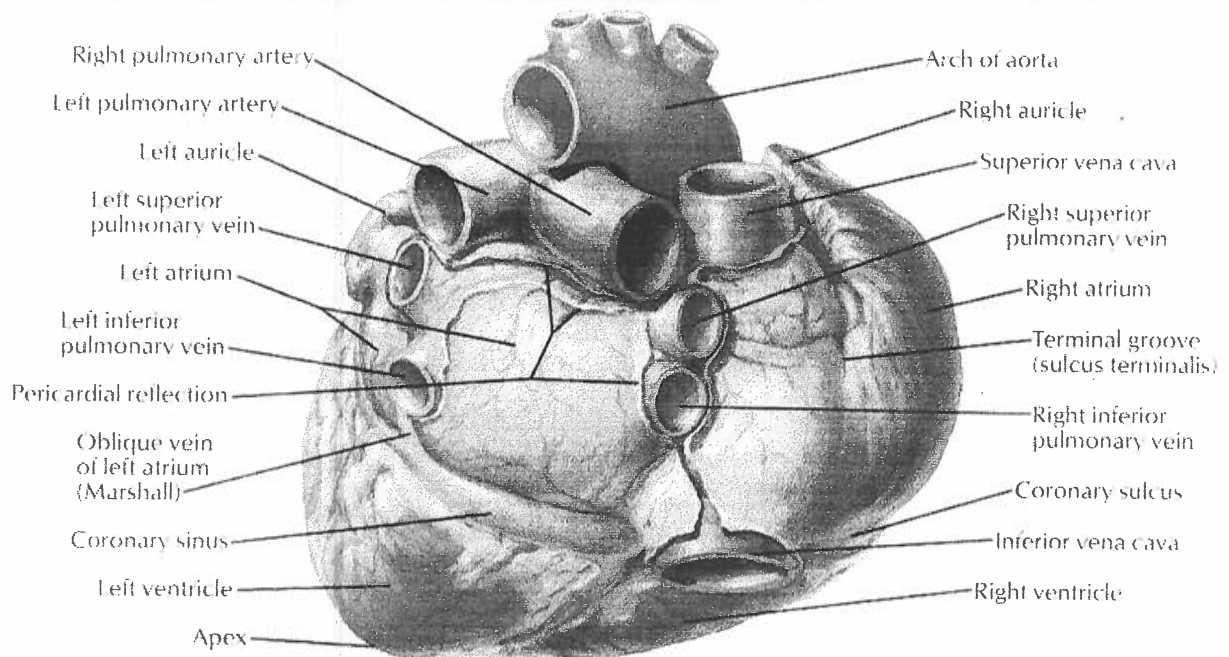
57. (D) Radical lymphadenectomy is a bilateral resection of retroperitoneal lymph nodes to treat testicular tumors.

58. (C) Vasovasostomy is the surgical reanastomosis of the vas deferens, utilizing the operative microscope.

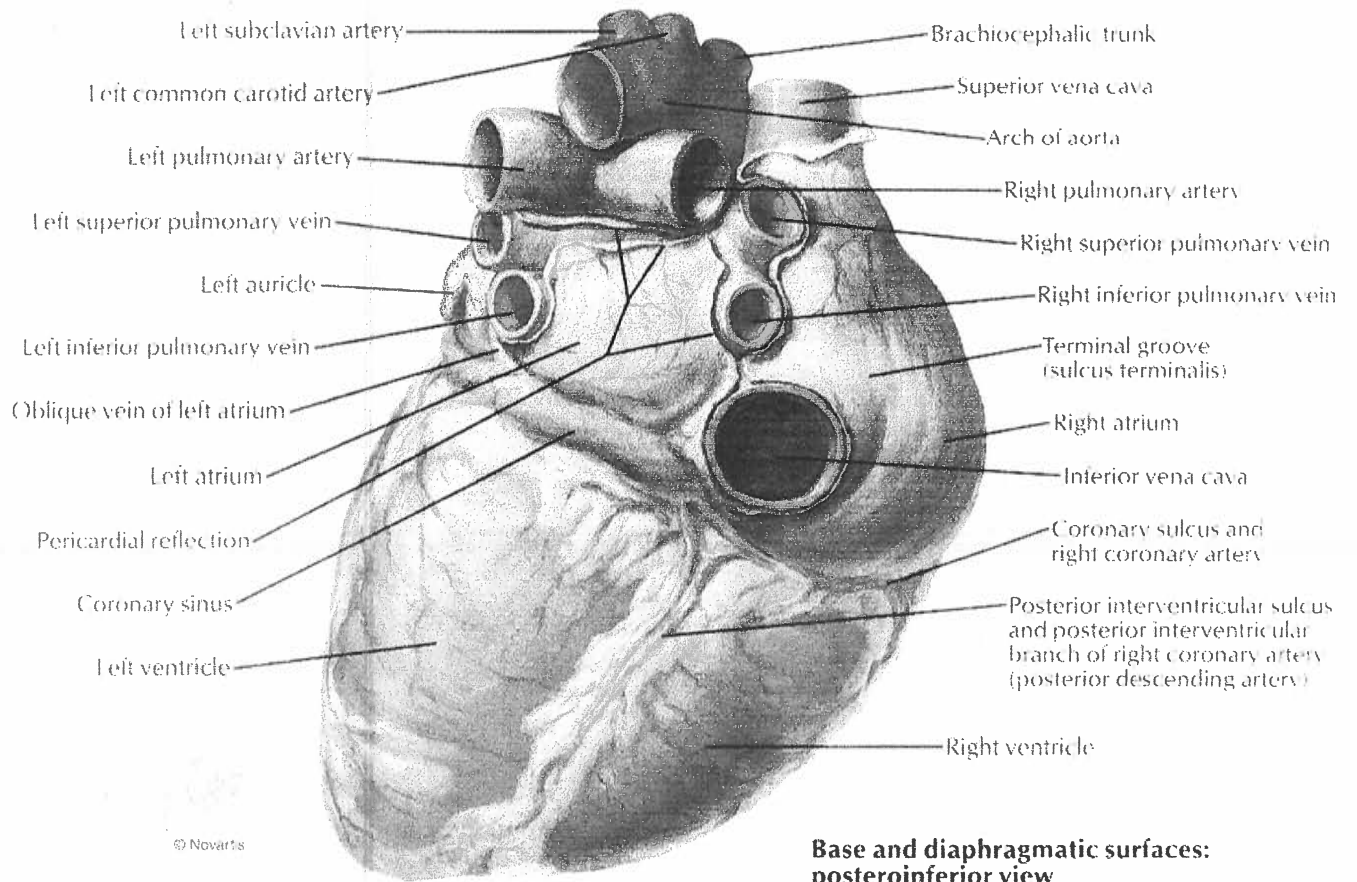
59. (C) The Tru-cut or Vim-Silverman biopsy needle is used to retrieve a prostate biopsy

60. (D) Kidney transplant entails transplantation of a living related or cadaver donor kidney into the recipient's iliac fossa.

Please refer to the netter plates for plate question answers



Base of heart: posterior view



**Base and diaphragmatic surfaces:
posteroinferior view**

Practice Test 2

Answers

Certification review 3 answers; you will need your netter plates for the netter answers.

1. (C) Endoscopic suspension of the vesical neck for stress incontinence is a Stamey procedure.
2. (A) bladder neck suspension
3. (C) Heparin is the most common drug used in vascular surgery. It may be given as an intravenous bolus to systemically anticoagulate the patient. It is given prior to the placement of the vascular clamp and is monitored regularly during surgery to determine its level in the body.
4. (B) A low-molecular-weight protein that, when combined with heparin, causes a loss of anticoagulant activity is called Protamine sulfate.
5. (A) A direct anatomic arteriovenous fistula provides a dilated vein valuable for direct cannulation with large-bore needles for hemodialysis
6. (D) Arthrodesis is most commonly employed to relieve pain by eliminating motion, to provide stability where normal ligament stability has been destroyed, or to correct deformity by realignment at the level of fusion.
7. (B) Scoliosis is a lateral curve and rotation' of the spine.
8. (B) Harrington rods are used with spinal fusion to treat scoliosis.
9. (A) A Bankart is done for a rotator cuff tear or recurrent anterior dislocation of the shoulder. Keller, McBride, and Silver are types of bunionectomies.
10. (B) Talipes varus, the condition known as clubfoot, refers to the inversion of the forefoot.
11. (D) Tears in the menisci (semilunar cartilage) are the most common knee injuries, usually medial meniscus.
12. (A) A valve system such as Holter, Hakim, or Denver directs the flow of CSF in children with hydrocephalus.

13. (B) Intussusception is the telescopic invagination of a portion of intestine into an adjacent part with mechanical and vascular impairment frequently at ileocecal junction.
14. (B) Atresia is an imperforation or closure of an opening. Atresia and stenosis (a narrowing of an opening) are the most common causes of obstruction in a newborn.
15. (B) Failure of the intestines to become encapsulated within the peritoneal cavity during fetal development results in herniation through a midline defect in the abdominal wall at the umbilicus. This is termed omphalocele.

16. (B) The first sign of pyloric stenosis is projectile vomiting free of bile. The surgical procedure for repair is a pyloromyotomy. The muscles of the pylorus are incised to relieve the stenosis.
17. (A) Hirschsprung's disease is characterized by the presence of a segment of colon that lacks ganglia (congenital aganglionosis). Surgery for this anomaly requires several biopsies to locate the section of bowel with normal ganglia, followed by resection of the portion that is aganglionic.
18. (C) A newborn anomaly that is evidenced by incomplete closure of the vertebral arches, with or without herniation of the meninges, is called spina bifida.
19. (C) In craniostylosis, the suture line of an infant has closed prematurely. A synthetic material (such as silicone) is used to keep the edges of the cranial sutures from reuniting and preventing brain growth.
20. (B) In imperforate anus, the anus remains closed during fetal development and must be opened soon after birth.
21. (D) Geriatric patients are prone to infection, poor wound healing, and cardiovascular problems. Obesity is a greater contributing factor to liver and biliary disease.
22. (A) A Wilms' tumor, also known as nephroblastoma, is the most common intra-abdominal childhood tumor. It presents as a painless mass whose enlargement may laterally distend the abdomen.
23. (A) Incomplete closure of the paired vertebral arches in the midline of the vertebral column may occur without herniation of the meninges. A spina bifida may be covered with intact skin. Laminectomy may be indicated to repair the underlying defect.
24. (C) During fetal life, the ductus arteriosus carries blood from the pulmonary artery to the aorta, bypassing the lungs. This duct closes in the first hours after birth. Nonclosure is termed patent ductus arteriosus and requires surgical closure.
25. (B) Tetralogy of Fallot is the most common congenital cardiac anomaly in the cyanotic group. It is the result of shunting unoxygenated blood into the systemic circulation.
26. (C) Recession is a procedure done for strabismus where the muscle is overactive. All other procedures listed deal with the under-active (weak) eye muscle.
27. (C) Pulmonary artery bonding is used for anomalies associated with excessive pulmonary blood flow due to large intracardiac left-to-right shunts. These include ventricular septal defect, truncus arteriosus, and others.
28. (B) Closure of the patent ductus arteriosus, an abnormal communication between the aorta and the pulmonary artery, is achieved
29. (C) Propranolol hydrochloride (Inderal) is useful in ventricular fibrillations or tachycardia. It is hazardous when cardiac function is depressed. It is also used in treating hypertension.

30. (A) Calcium chloride is useful in profound cardiovascular collapse. It increases myocardial contractility, enhances ventricular excitability, and prolongs systole. Calcium cannot be given together with sodium bicarbonate because a precipitate forms from the mixture.

31. (D) Sodium bicarbonate counteracts metabolic acidosis generated during time without oxygen. It elevates the pH of the blood. It restores the bicarbonate ion.

32. (B) Lidocaine (xylocaine) is used intravenously for treatment of cardiac arrhythmias, particularly ventricular in nature. It is used before, during, and after cardiac procedures, in cardiac arrest, and in treatment and prevention of irritability in myocardial infarct.

33. e

34. d

35. c

36-38 Bankart procedure- anterior capsule is reattached to the rim of the glenoid.

Putti-platt- capsule is reattached to the rim of glenoid, plus the lateral advancement of subscapularis to produce a barrier against dislocation.

Bristow procedure- coracoid process along with attached muscles detached and inserted onto the neck of glenoid cavity, it is attached with a screw. This stabilizes anterior joint capsule- lot of disadvantages

39-40. The Thoracic Duct: Same length as the Spinal cord (18 inches), it begins in the abdomen at the Cisterna Chyli (which is an elongated sac under the right crus of the Diaphragm. Three main trunks drain into the cisterna chili; right and left lumbar and intestinal. Lumbar convey lymph from stomach, spleen, liver and intestines. The thoracic duct ends in junction between internal jugular and subclavian vein (which arises from innominate vein off superior vena cava.

41. The celiac artery is the first branch of the abdominal aorta, it is short, about .5 inch in length, It trifurcates into the left gastric artery, splenic artery and hepatic artery.

42. The tibial and common peroneal nerves are terminal branches of the sciatic. Sural nerve is a cutaneous branch from the tibial nerve.

43. When abduction, flexion and internal rotation of the femur on the tibia occur, the medial supporting structures, the tibial collateral ligaments, and medial capsular ligament, are the initial structures injured. If the force is great, the ACL will also be torn. The medial menisci may be trapped between the condyles of the femur and the tibia, and can be torn at its periphery as the medial structures tear "the unhappy triad" of O' Donoghue. Or called (terrible triad).

44. Baker's cyst; back of the knee, (popliteal cyst) can result from an enlargement of the semi membranous bursa or bursa beneath the medial head of the gastrocnemius, Seems to be associated with a menisci tear.

45. ligamentum teres

46. two thirds
47. femur
48. radial
49. c.
50. b
51. c
52. C. embolism
53. D. thumb opposition, hand
54. rectus abdominis
55. levator ani
56. a. Ends of long bones
57. c. sebaceous
58. d. 31
59. c. VIII
60. a. cerebellum
61. d. cerebrum
62. d. medulla oblongata
63. c. At the base of the brain
64. b. Femoral artery
65. d. two common iliac arteries
66. a. Sinoatrial node
67. transverse carpal
68. 30
69. 120 days
70. foot down
71. cystic duct and hepatic duct
72. bilirubin
73. in the curve of the duodenum
74. Ileocecal sphincter
75. duodenum
76. Hypospadias is characterized by an abnormal positioning of the meatus, the opening from which urine passes. The defect may occur anywhere along the underside of the penis down to the scrotum.
77. B. The clamp on the internal carotid artery should be removed last so that all debris left in the area is flushed out through the external carotid artery.
78. The scenario is describing the anesthesia emergency malignant hyperthermia (MH). Dantrolene is the medication given to combat MH (2-3 mg/kg until signs are controlled). Some signs of MH are tachycardia, tachypnea, hypercarbia, muscle stiffness and rigidity, hypoxia, elevated BP, cardiac dysrhythmias, changes in CO₂ absorption, and elevated temperature.
79. A. Papaverine
80. A. Steep reverse Trendelenburg position decreases venous return. Sequential compression stockings are applied to prevent deep venous thrombosis.
81. C. Thrombin will cause blood in the vessel to clot and will cause thrombosis, which can lead to death if not realized and corrected immediately
82. C. The definition of a rectocele repair states that the levator ani muscle can be used to build up the perineum.
83. The patient must understand and agree to the procedure to be performed.
84. Lag screw placement within 1 cm (10 mm) of the femoral articular surface is considered optimal for fracture fixation.
85. Both CO₂ and Nd:YAG lasers are used for gynecological surgery- Nd:YAG lasers are now widely used for deep internal procedures like gynecological surgery. However, argon lasers are not used for gynecological- Ruby lasers are used for port wine stains-

Practice Test 3

Answers

2011 Certification review 4 answers

1. b. transverse
2. a. labrum
3. ilium, ishium, pubis

4. 1. Celiac trunk 2. Splenic artery 3. Left gastric artery 4. Common hepatic artery 5. Gastroduodenal artery 6. Proper hepatic artery 7. Left hepatic artery 8. Right hepatic artery

5. a. metastatic disease, the primary site usually from the GI tract.
6. c. Hepatocellular carcinoma
7. b. hemangioma
8. c. right trisegmentectomy

9. 1. Portal vein 2. Coronary vein 3. Splenic vein 4 IMV (inferior mesenteric vein)
5. SMV (superior mesenteric vein) 6. Superior hemorrhoidal vein

10. a. cirrhosis about 90% of cases. Cause of cases outside the U.S.- schistosomiasis

11. 1. Intrahepatic ducts 2. Left hepatic duct 3. Right hepatic duct
4. Common hepatic duct 5. Gallbladder 6. Cystic duct
7. Common bile duct 8. Ampulla of Vater

12. b. spiral valves of Heister

13. b. right hepatic, located close to cystic artery and calot's triangle

14. a. cholangitis , bacterial infection of the biliary tract from obstruction, Gram negative most common

15. a. Klatskin . Gilbert syndrome –inborn error in bilirubin uptake

16. 1. Thoracodorsal nerve 2. Long thoracic nerve 3. Medial pectoral nerve 4. Lateral pectoral nerve 5. Axillary vein

17. b. long thoracic, injury causes winged scapula or pigeon wing

18. a. thoracodorsal

19. d. intercostobrachial nerve

20. a. axillary

21. Ligament of a. Berry

22. The recurrent laryngeal nerves, which are found in the tracheoesophageal grooves and dive behind the cricothyroid muscle; damage to these nerves paralyzes laryngeal abductors and causes hoarseness if unilateral and airway obstruction is bilateral.

23. Superior laryngeal nerve; if damaged, patient will have a deeper and quieter voice (unable to hit high pitches)

24. C. cecum.

25. A. greater omentum

26. A. catabolism

27. A. mesentery

28. B. second line of defense.

29. B. pinocytosis.

30. C. fomites.

31. A. Golgi complex

32. B. lysosome

33. B. meiosis.

34. B. Fentanyl citrate and droperidol (Innovar-injection is a combination of the two.

35. A. thiopental (Pentothal).

36. A. antibiotic.

37. B. sphygmomanometer.

38. A. calcium chloride.

39. D. levarterenol (Levophed).

40. A. analgesic.

41. B. renografin.

42. C. Adrenalin

43. C. lidocaine.

44. A. expand blood plasma volume.

45. C. secobarbital (Seconal).

46. employer liability for employee's negligent conduct

47. A. doctrine of reasonable man.

48. B. holds each individual responsible for his or her own actions.

49. b. stomach

50. a. lesser sac

51. d. accessory organs

52. a. gt

53. . ointment

54. a. nearer to the body

55. b. movement toward median plane

56. a decrease supply of oxygenated blood to a body part or organ

57. The percentage of each type of white cell

58. a. agglutination

59. c. 5000 -- 10,000

60. b. Greater saphenous

61. c. Median cubital vein

62. a. Gelfoam

63. c. heparin

64. Warfarin sodium

65. d. Gentamicin

66. c. Prostigmin

67. a. An antiemetic

68. A key component is inflammation of symmetrical joints.

69. E. Placing the patient with an acute attack on bed rest for about 24 h after the attack has subsided
70. C. Onset in women is usually postmenopausal.
71. A. Rheumatoid
72. B. Prostate cancer with metastasis
73. B. Bone growth is completed at about age 20 in both genders
74. A. A 62-year-old African American woman with hypertension
75. A. Segmental
76. E. Type V
77. D. Sugar tong
78. Ulnar
79. B. Treatment involves extending the elbow
80. B. Cessation of offending activity for several weeks
81. C. Aspiration and chemical cauterization
82. E. Bicipital tendonitis
83. B. This patient will probably not be able to walk on her toes.
84. E. All of the above
85. C. Multiple myeloma is the most common malignant primary bone tumor.
86. C. To identify degenerative changes
87. C. Spondylolysis
88. C. Osteoarthritis
89. D. Thenar atrophy
90. C. Olecranon
91. d. medial collateral
92. e. medial meniscus
93. a. methotrexate
94. D. The half-buried mattress- explanations of other choices:
- A. The simple running stitch would lend itself to wound dehiscence. Although the 0 gauge is an appropriate gauge suture, the SH needle is not the optimal needle for closing muscle. Vicryl is a braided stitch that would lead to wicking of postoperative SSI should it occur.
- B. The Cushing suture is a continuous vertical mattress stitch that closes lumens. The Prolene stitch is not the best choice on muscle because it is non-absorbable. However, the FS needle is an appropriate needle selection for closing this layer.
- C. The Halstead suture technique is a double-layer closure used on friable tissue, which muscle is not. The 0 gauge suture is an appropriate gauge suture. Vicryl is a braided stitch, which would lead to wicking of postoperative SSI should it occur. The CTX needle is not an appropriate needle selection for closing this layer because the curve is too large for the proximity of the edges of the wound.
- D. The half-buried mattress (Grey-Turner) method of suture is a series of inverted interrupted horizontal or vertical mattress stitches. In this method, the knot is tied deep to avoid the incision line and prevent irritation. The interrupted status helps to avoid wound dehiscence should a suture fail. PDS has the same qualities of Vicryl, but is monofilament so it does not lend itself to wicking of possible SSI. The 0 gauge is an appropriate gauge suture. The FS needle is an appropriate needle selection for closing this layer.

95. B. All 3 components to this question are contributing factors to higher risk of wound infection: 1) the age of the patient, 2) the extended time of the procedure, and 3) the wound classification.

96. B. The right atrium sends deoxygenated blood to the bypass unit through the venous cannula. The ascending aorta carries oxygenated blood to the patient via the aortic cannula. The right ventricle is not used in the bypass circuit at all. The right superior pulmonary vein is used for left ventricular venting through a vent cannula.

97. C. Interrupted retention suturing effectively provides a secondary suture line relieving strain on the wound and providing a better opportunity for healing by first intention. Multifilament (braided) absorbable suture material is not optimal in the presence of infection or in patients with predisposing factors for wound dehiscence. Continuous suturing technique is usually used where there is little wound tension and may not be adequate in a patient with multiple predisposing factors for wound dehiscence. Blunt surgical needles are utilized in the presence of friable tissue and do not impact wound healing in the presence of infection.

98. A. Correct response

99. Lisfranc

100. C. Affirmative defense is a defense used by a defendant in medical, professional, and liability suits that allows the accused to present factual evidence that the patient's condition was caused by some factor other than the defendant's negligence. Denial is a defense that claims innocence of the charges or that one or more of the four Ds of negligence are lacking. Technical defense is a defense based on legal technicalities used in a lawsuit. Consequential damages are monetary awards to a plaintiff based on losses caused indirectly by a product defect.

Practice Test 4

Answers

2011 certification review 5 answers

1. c. Winslow
2. Two muscles form the pelvic diaphragm levator ani and coccygeus
The pubococcygeus and the iliococcygeus muscles form the levator ani.
3. Denonvillier's
4. a. Retzius
5. The arterial supply to the bladder is derived mainly from **the internal iliac artery**; small branches from the obturator and the internal pudendal arteries are supplied to the anterior part of the bladder. The *superior vesical artery*, which is the unobliterated part of the umbilical artery supplies the superolateral wall. The *inferior vesical artery* is distributed between the floor of the bladder, the prostate and the prostatic in urethra. The *middle hemorrhoidal artery* supplies a branch to the posterior surface of the bladder.
6. A The distal radius is the bone most frequently fractured in wrist injuries.
7. (D) 'Scaphoid fractures are the most common carpal fractures.
8. (B) The patient with a displaced femoral neck fracture will not be able to bear weight and will have a shortened, externally rotated leg.
9. B. Uterine
10. a. spring
11. c. renal pelvis
12. D. ulnar nerve.
13. C. Radial
14. A. Abduction of the shoulder.
15. D. anterior cruciate ligament.
16. B. ulnar nerve.
17. C) cuboid bone
18. Accessory peritoneal membranes of surgical importance near **the cecum** are Lane's ileal membrane and Jackson's membrane.
19. splenic flexure.
20. e. sigmoid colon
21. a. superior mesenteric
22. b. inferior mesenteric
23. b. Riolan
24. A The ovary is suspended from the posterior leaf of the broad ligament by the mesovarium
25. d. abdominal aorta
26. (A) A radical vulvectomy involves abdominal, perineal, and groin dissection; it requires a double setup.
27. A) Cystoceles (bulging bladder) and rectoceles (bulging rectum) occur due to weakened vaginal mucosa. Usually the cause is. traumatic childbirth, and the cure is an anterior and posterior vaginal repair.
28. B
29. C. Round ligaments. These two narrow flat bands containing fibrous tissue and non-striated muscle are homologous with the gubernaculum testis in the male and pass from the lateral angle of the uterus on each side through the internal ring into the inguinal canal to emerge into the labium majus where they break up to strands. They run in the upper

part of the broad ligaments just below and in front of the uterine tubes, passing over the vesical vessels and nerve, the obliterated umbilical artery and the external iliac vessels to enter the deep inguinal ring by hooking around lateral to the inferior epigastric artery.

30. (B) Functional cysts comprise the majority of ovarian enlargements. Follicle cysts are the most common.

31. D An enterocele is a herniation of Douglas' cul-de-sac and almost always contains loops of the small intestine. It herniates into a weakened area between the anterior and posterior wall

32. (C) A Marshall-Marchetti procedure is an abdominal approach to repairing and elevating the fascial and the pubococcygeal muscle surrounding the urethra and the bladder neck for the correction of stress incontinence.

33. (C) A vesicovaginal fistula may vary in size from a small opening that permits slight leakage of urine into the vagina to a large opening that permits all urine to pass to the vagina.

34. (B) An operative approach to early carcinoma of the cervix is a radical vaginal hysterectomy called a Schauta operation. It is useful in obese patients and removes the uterus, upper third of the vagina, parametria, fallopian tubes, and ovaries

35. 28. (B) Colpocleisis (leFort) is obliteration of the vagina by denuding and approximating the anterior and posterior walls of the vagina and is generally reserved for elderly.

36. (C) The Candela laser is valuable to disintegrate stones in the urinary tract due to the fact that it is tunable and the wavelength can be adjusted. The CO₂, argon, and Nd: Y AG are used to treat pelvic endometriosis, cervical dysplasia, condylomata, and premalignant diseases of the vulva and the vagina.

37. A The uterine artery is a branch of the anterior trunk of the internal iliac artery. It runs downwards, forwards and medially across the levator ani and then at the base of the broad ligament crosses anterior and above the ureter about 2cm lateral to the lateral vaginal fornix. The vaginal artery may arise from the uterine artery. Having crossed over the ureter, the uterine artery passes upwards along the lateral margin of the uterus between the two leaves of the broad ligament. It then passes laterally under the fallopian tube to anastomose with branches of the ovarian artery in the region of the mesovarium, having given off branches to the fallopian tube and the round ligament.

38. d. Trochlear (IV)

39. c. (VI) Facial (VII)

40. b. Vagus(X)

41.e. Trigeminal (V)

42. Glossopharyngeal (IV)

43. c. Oculomotor (III)

44. c. Abducens

45. c. Accessory (XI)

46. a. Optic (II)

47. b. Osteochondritis dissecans
48. a. Chondromalacia
49. b. sprain
50. Bunion deformity. Drop finger -laceration of extensor tendon on dorsum of hand or wrist, Mallet finger- laceration of insertion of tendon into distal phalanx.
51. C. Eyes closed; no response to pain; no vocalization
52. B. Common carotid bifurcation—origin of the internal carotid most common site.
53. B. Right occipital lobe
54. B. Rupture of cerebral aneurysm
55. D. Secondary metastasis
56. B. Cerebrovascular disease
57. B. Fetal alcohol syndrome
58. C. Gram-negative bacilli—bacterial meningitis
59. C. Pituitary tumor
60. D. III
61. A. Subarachnoid hemorrhage is sometimes not visible on CT scan
62. [B] Fentanyl is injected, not inhaled.
63. [A] Thiopental sodium {Pentothal} is most commonly used for induction.
64. [A] Cephalothin sodium {Keflin} is an antibiotic.
65. [B] Indirect, arterial blood pressure is obtained on a sphygmomanometer.
66. [A] Sodium bicarbonate is an electrolyte used to correct acidosis
67. [A] Calcium chloride is used in cardiac surgery to increase myocardial contractility.
68. [D] Levarterenol (Levophed") is used to treat hypotension and shock.
69. [A] Meperidine hydrochloride (Demerol") is an analgesic.
70. [B] Renografin is a radiopaque contrast medium used in surgery.
71. [C. A trademark name for epinephrine is adrenalin.
- 72: [C) Lidocaine is used to treat ventricular arrhythmias during and after cardiac procedures.
73. [A] Dextran is a plasma volume expander that acts by drawing fluid from tissues, thus decreasing blood viscosity.
74. [C] A barbiturate that may be given for sleep the night before surgery is secobarbital (Seconal").
75. [C. Steroids are given to reduce tissue inflammation and swelling.
76. [B] Lidocaine is the most widely used an-esthetic agent.
77. [A. Succinylcholine chloride (Anectine") is a rapid-onset muscle relaxant used for intubation in short cases

78. B. The gastric arteries run between the greater curvature of the stomach and the spleen. The common duct is medial to the stomach. The pancreatic duct is retroperitoneal and underneath the stomach. The splenic artery runs retroperitoneal below the stomach

79. B. A type II SLAP lesion indicates damage to the glenoid labrum with instability and indicates surgical repair.

80. D. Atropine suppresses bronchial and gastric secretions and salivation

81. B. Epithelial cells migrate, proliferate, and cover the surface to close the epithelial defect in the fibroplastic phase. During remodeling, scar tissue is formed and fibroplasia changes as it builds and forms strength. Blood supply is increased to the area and the basic process of inflammation is started.

82. A. Correct response

83. D. This is the optimal sterilization time and temperature for routine sterilization.

84. A. Routinely, a T-tube is temporarily left in the common bile duct after surgery for drainage. A Penrose is used for more superficial drainage and does not provide any support for this draining process. A Hemovac is a suction drain and is contraindicated in a common bile duct exploration. A Blake is a suction drain and is contraindicated in a common bile duct exploration.

85. D. Bowie-Dick determines the effectiveness of the vacuum system as described by the Association for the Advancement of Medical Instrumentation (AAMI). Biological indicators are used to determine the effectiveness of gravity displacement sterilization. External indicator tape is an external indicator for determining exposure to heat. Cycle parameter tape cannot verify effectiveness in prevacuum sterilization.

86. D. Protamine sulfate is a purified form of protamine used in surgery to neutralize the anticoagulant action of heparin. Protamine is found in fish sperm and named for the fish from which it is derived. Papaverine is a chemical derived from the opium poppy that is used as a smooth muscle relaxant during surgery. Heparin sodium is primarily derived from porcine intestinal mucosa and is used in surgery as a systemic anticoagulant.

87. C. A mattress suture is utilized to close the wound postoperatively when the chest tube is removed. It may be inserted prior to chest tube insertion to maintain sterility and prevent inadvertent suturing through the chest tube drain. The drain sponge is a dressing applied postoperatively. Vaseline gauze is utilized after chest tube insertion in the event a leak exists.

88. B. A Sundt carotid shunt is utilized to supply sufficient bloodflow to the brain during carotid endarterectomy. 10 ml/100 g is a critical flow level for cell viability.

89. D. Evisceration is the protrusion of viscera through the full thickness of the abdominal incision. Rupture is a verbal description of a wound opening due to lack of support from wound closure or postoperative infection. It does not describe the viscera protruding through the opening in the wound. Dehiscence is the medical term used to describe a rupture of a wound. It does not describe the viscera protruding through the opening in the wound. Disruption is a verbal description of a wound opening due to lack of support from wound closure or postoperative infection. It does not describe the viscera protruding through the opening in the wound.

90. B. This is the ideal body temperature for healing and recovery

91. C. The Fogarty arterial embolectomy catheter is typically used to remove arterial clots during an embolectomy procedure. The Swan-Ganz catheter is placed into the pulmonary artery to measure pulmonary pressure. The Groshong is a central venous catheter used for medication administration. The Broviac catheter is usually used for long-term intravascular access.

92. B. Ligation of the inferior mesenteric artery is possible during resection of an AAA due to collateral arterial flow to the descending and sigmoid colon.

93. B. Res ipsa loquitur (or The Thing Speaks For Itself) is a doctrine that applies to injuries sustained by a patient while in the operating room. Primum Non Nocere (or First Do No Harm) is a statement that guides a physician in the care of a patient. Foreseeability applies to the doctrine which provides proximate cause in negligence, which states that something similar was likely to happen in a different situation under similar circumstances.

94. C. The patella tendon autograft is preferred in ACL reconstruction because it allows for harvesting of the graft with tibial and patellar bone plugs, which is important for graft fixation. The semi-tendinosis tendon (hamstring autograft) is not as widely used or preferred due to the lack of bone plugs at either end of the graft.

95. B. The peroneal nerve branches from the sciatic nerve behind the knee and wraps through superficial tissue around the lateral head of the fibula. The peroneal nerve is exceptionally vulnerable to injury when positioning a patient in lithotomy stirrups. The pudendal nerve originates from S2-S4 and enervates the muscles of the perineum and the skin of the external genitalia. The femoral nerve originates from L2-4 and primarily distributes to the flexor muscles of the thigh, the extensor muscles of the leg, and the cutaneous tissues of the anterior and medial thigh. The obturator nerve originates from L2-4 and largely distributes to the adductor muscles of the leg and the cutaneous tissues of the medial aspect of the thigh.

Practice Test 5

Answers

2011 certification answer 6

1. serratus anterior
2. *Axillary tail of Spence*
3. The Mammary gland is fixed to the overlying skin and the underlying pectoral fascia by fibrous bands known as *Cooper's ligaments*. These are clinically important because cancer cells invade them and subsequently cause their contraction, which results in dimpling of the skin or fixation of the growth.
4. Blood is supplied to the breast from *three* arterial sources: (1) the anterior perforating branches of the internal mammary and (2) the lateral thoracic arteries. 3. branches from the axillary artery. Since these vessels pass above the nipple and in a transverse direction, the blood supply of the gland is located mainly at its superomedial and superolateral aspects. An incision into the breast is usually placed below the nipple to preserve the blood supply and make the scar less visible.
5. *Retromammary space* is the loose areolar tissue separating the breast from the pectoralis major muscle
6. Rotter's nodes," between pectoralis major and minor muscles
7. Long thoracic nerve medial axilla also called the external respiratory nerve of BELL
8. Thoracodorsal nerve (lateral axilla)
9. lobules
10. 40-55
11. bone 50% of cases, lung 20%, pleura 15% soft tissue 10% liver 10%
12. (B) Gynecomastia is a relatively common pathologic lesion that consists of bilateral or unilateral enlargement of the male breast. Surgery consists of removal of all subareolar fibroglandular tissue and surgical reconstruction of the resultant defect.
13. (C) Retention sutures may be used as a precautionary measure to prevent wound disruption and possible evisceration of the wound.

14. (B) Pyloroplasty is the formation of a larger passage between the pylorus of the stomach and the duodenum. It may include the removal of a peptic ulcer if one is present.
15. (B) A Whipple operation is a radical surgical excision of the head of the pancreas, the entire duodenum, a portion of the jejunum, the distal third of the stomach, and the lower half of the common bile duct. There is then reestablishment of continuity of the biliary, pancreatic, and gastrointestinal systems. This is done for carcinoma of the head of the pancreas and is a hazardous procedure.
16. (C) A left subcostal incision is generally used for spleen surgery. The right subcostal is used for gallbladder, common bile duct, and pancreatic surgery.
17. (B) A lower oblique incision, either right or left, is an inguinal incision. This incision gives access to the inguinal canal and cord structures.
18. (C) The Pfannenstiel incision is frequently used for pelvic surgery. It is a curved transverse incision across the lower abdomen, 1 inches above the symphysis pubis. It provides a strong closure.
19. (C) A modified radical mastectomy involves removal of the involved breast and all three levels of axillary contents. The underlying pectoral muscles are not removed.
20. (B) Simple mastectomy is removal of the entire breast without lymph node dissection, performed to remove extensive benign disease or a confined malignancy.
21. (C) The diseased portion of the esophagus and stomach are removed through a left thoracoabdominal incision, including a resection of the seventh, eighth, or ninth ribs. Here an anastomosis is accomplished between the disease-free ends of the stomach and the esophagus.
22. (A) Retention or tension sutures may be used in a vertical midline incision to ensure strength of closure and support.

23. (C) Sodium hyaluronate {Healon} is a viscous jelly sometimes used to occupy space and prevent damage when opening the anterior capsule.
24. (A) Pilocarpine is a miotic. A miotic causes the pupil to contract.
25. (8) Tetracaine provides rapid, brief, and superficial anesthesia. It is widely used as a local ocular anesthetic. It is the generic name for Pontocaine.
26. (8) Hyaluronidase is commonly added to an anesthetic solution. This enzyme increases diffusion of the anesthetic through the tissue, thereby improving the effectiveness of the block.
27. (D) Balanced salt solution is an eye irritant. It is used to keep the eye moist during surgery. It is supplied in a sterile solution.
28. (D) Tetracaine produces surface anesthesia in eye surgery and is available in an 0.5% concentration for this use. Pontocaine is the trade name for this topical solution.
29. (A) Mydriatics dilate the pupil while allowing the patient to focus. A cycloplegic drug also can dilate the pupil, but it disturbs focusing ability.
30. (D) In extracapsular extraction, the phaco-emulsifier is used in a microsurgical technique to remove the lens. Ultrasonic energy fragments the hard lens, which can then be aspirated from the eye.
31. (B) Removal of a chalazion is the incision and curettage of a chronic granulomatous inflammation of one or more of the meibomian glands of the eyelid.
32. (D) Chronic dacryocystitis in adults requires dacryocystorhinostomy to establish a new tear passageway for drainage directly into the nasal cavity to correct deficient drainage with overflow of tears.
33. (A) A scleral buckling is the operative treatment for retinal detachment. The procedure is aimed at preventing permanent vision loss by sealing off the area in which a hole or tear is located.

34. (C) Ectropion is the sagging and eversion of the lower lid. It is common in older patients and is corrected by a plastic procedure which shortens the lower lid in a horizontal direction.
35. (C) Enucleation is removal of the entire eye- ball. Evisceration is removal of the contents of the eye, leaving the sclera intact.
36. A
37. C
38. The small posterior branches of the vagus nerve occasionally missed during a truncal vagotomy.
39. The diaphragm veins that drain into the liver
40. A line drawn around the abdomen at approximately L2. It is thought that lymph drainage above Sappey's line goes to the axilla and below the line to the groin nodes.
41. The cystic node found in the triangle of Calot (also known as Calot's node)
42. The gallbladder infundibulum
43. The ducts of Luschka
44. The duct of Wirsung
45. The duct of Santorini
46. cystic duct, common hepatic, lower edge of the liver
47. arcuate
48. smooth
49. . Hilton
50. space of Riolan
51. Gas gangrene
52. *Rickettsia rickettsii*
53. The thorax is elevated when the patient is in the prone position in order to facilitate respiration. This is accomplished with supports, rolls, elevating pads, body rests, or braces.

54.) Injury to the brachial plexus can result from extreme positions of the head and arm. This can be avoided with proper care and careful observation
55.) For most open bladder surgery, the patient is placed in the supine position with a bolster under the pelvis. Trendelenburg may be desired to allow viscera to fall toward the head, allowing excellent pelvic organ exposure.
56. On the orthopedic fracture table, the patient is positioned supine with the pelvis stabilized against a well-padded vertical post. Pressure on the genitalia from the perineal post can injure the pudendal nerves.
57. (D) The aging patient's skin integrity is very important. Aging decreases range of motion of joints. The elderly cannot fully extend the spine, neck, or upper and lower extremities. Pillows, padding, and support devices compensate for the skeletal changes to ensure patient comfort and no postoperative pain or injury
58. 4.2 - 5.6 mill/mcl
59. 40 - 54%
60. 3.8 - 10.8
61. SODIUM - Sodium is the most abundant cation in the blood and its chief base. It functions in the body to maintain osmotic pressure, acid-base balance and to transmit nerve impulses. Normal Adult Range for Sodium: 135-146 mEq/L
62. POTASSIUM - Potassium is the major intracellular cation. Normal Range for potassium: 3.5 - 5.5 mEq/L
63. atrial depolarization
64. The common knot used in surgery is the square knot. The square knot consists of two mirror-image half hitches, one placed on the other; in contrast to a granny knot, which is made of two identical half hitches.
65. A surgeon's knot is merely one with a double half hitch for the first throw which can be locked by reversing the direction of pull on the segments.
66. The *simple suture* should have a square profile to avoid inverting skin edges. A good general rule for placement is that the width of each stitch equals the distance between sutures. The width varies with the thickness of the skin, the location, and the purpose of the suture.

67. The *Lembert* stitch incorporates the seromuscular layer and submucosa (the strong collagen-containing layer). It may be interrupted or continuous and is used for the outer layer of anastomoses. The *Halsted* stitch is an interrupted seromuscular horizontal mattress. A continuous horizontal mattress is called a *Cushing* stitch. The *Connell* stitch is a continuous inverting suture commonly used for the first layer (anterior wall portion) of a bowel anastomosis

68. Activity of the laser occurs in the resonating chamber (laser head), where the medium is contained

69. The CO₂ laser beam can damage the cornea; the argon and Nd: YAG beams the retina and pain felt latter.

70. Laser is a form of light measured in wavelengths "distance between two wave peaks"

71. Wavelength determines color and is measured in nanometers. The power or energy of a laser beam is measured in watts. Power density is the amount of power that is concentrated within an area;

Power density = $\frac{\text{watts}}{\text{Spot size}}$

Spot size

72. Argon

73. CO₂

74. Nd doubled YAG

75. laser

76. PACO₂, Pao₂ measure the amount of oxygen in the blood-80-100 mmHg

77. HCO₃

78. Halon

79. Pneumo-peritoneum CO₂ gas, pressure between 14-16 mmHg, veres inserted in a 45 degree angle, always pull-up on surrounding tissue to avoid bowel.

80. Improperly applied plaster or subsequent swelling produces pressure of the cast against underlying soft tissues over bone prominences, Skin circulation decreases, and necrosis results. In applying a cast the physician should expose the tips of the patient's toes or fingers in order to observe the parts for signs of neurovascular compression.

Pressure from a tight cast or padding, or hemorrhage and swelling into a muscular compartment compromise circulation to the extremity, Persistent neurovascular

interference invokes Volkmann's ischemic paralysis, especially after humeral supracondylar fractures and fractures or dislocations near the knee. In this syndrome muscular circulation decreases, necrotic and fibrotic scar replaces muscles, and permanent contracture

81. When severed by incision *or* traumatic injury, a blood vessel constricts and the ends contract somewhat. Platelets rapidly clump and adhere to connective tissue at cut end *of* a constricted vessel. Interaction with collagen fibers causes platelets to liberate adenosine diphosphate (ADP), epinephrine, and serotonin from their secretory granules. In turn, ADP causes other platelets to clump to the initial layer and to each other, forming a platelet plug. This may be sufficient in small vessels to provide primary hemostasis. The reaction *of* plasma from vessels with connective tissue cells at site *of* injury activates clotting factors and causes a series *of* other reactions. *Prothrombin*, normally present in blood, reacts with *thromboplastin*, which is released when tissues are injured. Prothrombin and thromboplastin, along with calcium ions in the blood, form *thrombin*. This requires several minutes. Thrombin unites with *fibrinogen*, a blood protein, to form *fibrin*, which is the basic structural material *of* blood clots.

82. dura mater, arachnoid, pia mater

83. astrocytomas

84. frontal and temporal lobe

85. trigeminal

86. vestibulocochlear

87. supraorbital and supratrochlear

88. X

89. I

90. epidural hematoma.

91. carotid bulb

92. presoreceptor

93. dura

94. platelets because they are stored at room temperature and staphylococci or strep from the donor's skin

95. Kocher. Cattell – mobilisation of the ascending colon to the mid-line, if combined with a Kocher it will expose the vena cava. Pringle- occlusion of the porta hepatitis to decrease blood flow to the liver to slow bleeding during a traumatic injury.
96. Mattox
97. inferior mesenteric, middle colic, left colic
98. Marginal artery of Drummond
99. Arc of Riolan
100. allograft. Xenograft from a different species, homograft same as allograft. Auto graft from the same individual.
101. radial artery
102. 37°C
103. hypovolemia
104. Bonanno suprapubic catheter
105. the tip of the catheter must be kept sterile
106. Third
107. mediastinal shift
108. a. ovary/fallopian tube
109. small intestine
110. round ligament
111. gubernaculum
112. 85%
113. 1. Internal carotid artery 2. External carotid artery
3. Carotid "bulb" 4. Superior thyroid artery 5. Common carotid artery . Shaded area:
common site of plaque formation
114. a. A-gram
115. a. hypoglossal
116. b. facial
117. b. ultrasound
118. ilioinguinal
119. Left Renal vein
120. Left Renal vein
121. B. Gauze is an absorbent material and wicks exudate away from the wound. Xeroform is petroleum jelly impregnated nonabsorbent dressing. Tegaderm is a transparent synthetic adhesive dressing material, impermeable to water and microorganisms, but permeable to moisture, vapor, and gas. Collodion is a liquid adhesive and wound barrier with no absorbent properties.
122. A. A chest tube is always placed above the rib to avoid injury to the neurovascular bundle, which runs on the superior aspect of the intercostal space.
123. C. 25-28 gauge wire is large enough to maintain fixation but as small as possible to reduce tissue reaction.

124. B. Purse string sutures allow the suture to be pulled tight around the cannulae to prevent blood leaks. Heaney sutures make a locking stitch and cannot be removed. Mattress sutures are used to evert the edges on skin closures. Grey-Turner sutures are a series of inverted interrupted mattress stitches.
125. D. Placing the drain system well below the chest allows for proper gravity drainage and prevention of tubing kinks.
126. B. 35% peracetic acid and some premixed buffering agents are contained in a canister that is used in the Steris unit as the active sterilant
Glutaraldehyde is a chemical sterilant usually used for scopes. It is not a sterilant of choice because of the amount of time needed to reach sterilization. Hydrogen peroxide is usually contained in a cartridge and used with the Sterrad unit. Cobalt 60 is an ionizing radiation form of sterilization and is usually used to sterilize most prepackaged materials received from manufacturers.
127. B. Zenker's diverticulum is a pouch at the back of the throat at a weak spot where the throat and esophagus join. A barium swallow is the most effective way to diagnose a Zenker's diverticulum. The barium solution fills the pouch in the esophageal wall so that it can be seen on an x-ray.
128. eliminate tremor associated with operating an endoscope.
129. B. The adnexa is defined as the uterine appendages, including the fallopian tubes, ovaries, and associated ligaments. The uterus must be severed from the adnexa for eventual removal.
130. C. A pulmonary embolism is a postoperative complication of laparoscopic Roux-en-Y. Sudden onset anterior chest pain, shortness of breath, and sweating profusely are all signs of pulmonary embolism.
131. B. These are all symptoms of malignant hyperthermia

Practice Test 6

Answers

2011 certification answer 7

1. (B) Polyglycolic acid is a synthetic absorbable suture that is not affected by enzymes but rather by the process of hydrolysis, whereby water in the body acts to break down the polymeric constituents.
2. (A) The leukocytes (white blood cells) normally range between 5,000 and 10,000 cells in each cu mm of whole blood. High white counts may be indicative of an unsuspected inflammatory process which could contraindicate surgery. It would not be contraindicated if surgery were to treat an infectious condition, eg, acute appendicitis.
3. (C) Meckel's diverticulum is a congenital sac or blind pouch sometimes found in the lower portion of the ileum. Strangulation may cause an intestinal obstruction.
4. A) mesentery tissue
5. (B) indirect
6. (B) caused by separation of wound edges that have not been closely approximated
7. (B) pectus excavatum
8. (B) hypovolemia
9. (D) angiography
10. (B) abdominal-perineal resection
11. (C) Prednisone
12. (C) thymectomy
13. (B) decrease coughing
14. (D) temporary colostomy
15. (C) reverse Trendelenburg
16. (C) lateral
17. (C) the lower leg is flexed with the upper leg straight
18. (A) handle case with flat open hands
19. (C) thromboembolism
20. (D) peroneal
21. (D) Ringer's lactate
22. (C) prevent pressure on the lower arm
23. (A) Healon
24. (B) prostate
25. (C) third
26. (D) *Staphylococcus aureus*
27. B) mannitol
28. (C) phimosis
29. B) second degree
30. (D) anaerobes
31. (A) testes, vas deferens

32. (A) retina
33. (C) frontal
34. (C) maxillary
35. (A) hypertension
36. (B) second
37. A) middle ear
38. (A) an abduction pillow
39. (C) argon
40. (C) duodenum
41. D) *Escherichia coli*
42. B) sodium bicarbonate
43. C) 350 to 400 mm Hg
44. (B) done last or separately
45. (C) pylorus
46. (B) diuretic
47. C) 700 to 800 mL, at 200-400 need to urine.
48. (A) tort
49. (D) Harrington rods
50. (C) Pentothal sodium
51. (D) nonconstrained
52. (D) invasion of privacy
53. B) chalazion
54. (D) secobarbital (Seconal)
55. (C) Dupuytren's contracture
56. B. *Hyponatremia*, insufficient serum sodium, usually accompanies excessive fluid loss or adrenal insufficiency. Muscle twitching, hypovolemia, hypotension, and tachycardia may be symptoms. Normal 135 to 145 mEq/L
57. b. 42%-54%, female 35%- 46%. *Percentage of red blood cells*
58. b. 14-18 g/dl, female 12.4-14.9 g/dl
59. 130,000-370,000/mm³
60. 9.6-11.8 sec, female-. . 9.5-11.3, *measures the bloods ability to clot.*

61. b. 25-36sec, measures the time it takes for fibrin to form a clot.

62. hyperkalemia. Normal range-3.8- 5.5mEq/L

63. b. hypochloremia, normal reading 100-108 mEq/L. Chloride plays a role in maintenance of oncotic pressure and thus blood volume and arterial pressure.

64. b. 1.005-1.020

65. **Nociception** is the transmission of the pain stimulus from the periphery to the brain. This begins with **transduction** of the physical stimulus to an electrical signal by free nerve endings in the tissues "damaged tissue releases chemical substances locally that stimulate these nerve endings". The nerves carry these signals from the periphery to the spinal cord and synapse in the dorsal horn with the cell bodies of second-order neurons. This process is called **conduction**.

66. a. Narcan

67. a. benzodiazepines

68. Suture line

69. random pattern Example; A V-Y advancement flap (often used in the coverage of fingertip soft tissue loss.

Axil or arterial: A flap based on direct cutaneous arteries perforating from an underlying artery

Flaps for the head and neck where a deltopectoral flap or a nasolabial flap is commonly used for reconstruction.

70. a. first degree 1. Superficial (first degree)-injury to epidermis, minimal dermal injury
2. Superficial partial thickness (second degree)-involvement of epidermis, moderate amount of dermis
3. Deep partial thickness (second degree)-involvement of epidermis, significant portion of dermis
4. Full thickness (third degree)- complete loss of dermis
5. Fourth degree-injury through dermis, for example, subcutaneous tissue, muscle, bone

71. d. Stensen's

72. Le Fort I-transverse fracture separating the maxillary alveolus from the upper midfacial skeleton

Le Fort II-fracture separating a pyramidal nasomaxillary segment from the zygomatic and orbital facial

Skeleton. Le Fort III-fracture separating the facial bones from the cranial skeleton through the upper orbits and nose

73. Ewing's sarcoma
74. a Thoracic duct
75. Pulmonary arteries (primarily for gas exchange) and bronchial arteries from aorta and intercostal aorta (supply lung parenchyma)
76. Azygous lobe (due to the developing lung forming a pleural mesentery-like structure around the azygous)
77. a. Right upper lobe region
78. b. Phrenic
79. a. vagus
80. azygous
81. left renal vein
82. a. IVC
83. c. kidney
84. b. gastro duodenal
85. A. Rotter's
86. b. Hesselbach's triangle
87. c. Ilioinguinal
88. a. Calots triangle
89. a. gastrinoma triangle
90. b. submucosa
91. a. vein of Mayo
92. c. Douglas
93. Lidocaine is acidic, which causes the burning; add sodium bicarbonate to decrease the burning sensation. Also the reason it does not work in an abscess, acidic environment.
94. Epinephrine is meant to vasoconstrict the small vessels and thus decrease bleeding and washing out of the lidocaine from the area, prolonging its effect. It is not used on the Fingers, toes, penis, etc., because of the possibility of ischemic injury/necrosis resulting from vasoconstriction.
95. a. induction agents
96. a. nondepolarizing muscle blockers
97. a. Neostigmine
98. narcan
99. c. adenocarcinoma
100. d. portal 50% OF OXYGEN to the liver comes from the portal vein and 50% of oxygen from the hepatic artery.
TOTAL % of sources that provide blood to the liver; Portal system 75%, Hepatic artery system 25%
101. pudendal
102. right hepatic
103. a. colon
104. 15

105 . Gallbladder

106. insulin

107.) A primary characteristic of Graves' disease hyperthyroidism. Other symptoms include weight loss, fatigue, palpitations, increased metabolic rate, and exophthalmos.

108. Tay-Sachs is an inherited neurodegenerative disorder of lipid metabolism characterized by progressive mental and physical deterioration. (*Mosby's 1682*)

109. [C] Cholesteatoma is a benign tumor that invades the mastoid cavity and destroys the mastoid air cells and can also damage the ossicles

110. [B] Pheochromocytoma is a tumor that affects the medulla of the adrenal gland, causing it to overproduce adrenaline, which can be a life-threatening condition. Treatment is surgical.

111. [c] The ureters enter the urinary bladder medially from the posterior aspect.

112. [AI The pleura membrane lines the thoracic cavity.

113. [B] The area between the lungs is the mediastinum.

114; [BI The common bile duct carries bile from the liver and gallbladder to the duodenum.

115. [A] The fundus, the antrum, and the body are parts of the stomach.

116. [0] The ligament of Treitz stabilizes the duodenojejunal angle.

117. [A] The mitral valve is located between the left atrium and left ventricle.

118. [c] The tunica adventitia, the tunica intima, and the tunica media are all structures of an artery.

119. [D] The wrist has eight bones known as carpals. They are the scaphoid, lunate, triquetrum, pisiform, trapezium, trapezoid, capitate, and hamate

120. The broad ligaments, the uterosacral ligaments, the cardinal ligaments, and the round ligaments maintain the position of the uterus.

121. C. Recession

122. . Pulmonary bonding

123. . lnderal@

124. Calcium chloride

125. A. Accomplished as a two-handed

126. C. Sutures should be placed in deep tissue to prevent hematoma.

127. Anterior capsule is reattached to rim of the glenoid

128. B. Temporal, zygomatic, buccal, mandibular, cervical

129. Suprasternal notch

130. B. Accessory

131. A. Mastoid sinus, facial nerve

132. A. Fibula

133. B. 4.6-8.0

134. B.C2

135. A. Labrum

136. A. Metastatic disease

137. Trisegmentectomy

138. B. Heister

139. C. Right hepatic

140. C. Right hepatic
141. A. Klatskin
142. A. Thoracodorsal
143. Gastric bypass
144. B. Gel pads
145. D. Bretylium
146. C. Heart failure
147. C. Improper traction of spermatic cord
148. C. Activities of daily living
149. Bacteria
150. B. Fungi
151. A. The padding on the elbows protects the ulnar nerve. The shoulder extension at no greater than 90° protects the brachial plexus.
152. B. Res ipsa loquitur (or The Thing Speaks For Itself) is a doctrine that applies to injuries sustained by a patient while in the operating room. Primum Non Nocere (or First Do No Harm) is a statement that guides a physician in the care of a patient. Foreseeability applies to the doctrine which provides proximate cause in negligence, which states that something similar was likely to happen in a different situation under similar circumstances.
153. A. Disturbances in the production or drainage of aqueous fluid in the anterior chamber can result in high pressure in the eye and lead to glaucoma. The central fovea is a small depression in the central retina in the posterior aspect of the eye. The cornea is located on the anterior surface of the eye. The iris functions in transmission of light.
154. C. An interrupted suture would allow for drainage. A polypropylene suture is a monofilament suture, which would be appropriate in this case. A continuous suture would seal the wound and is contraindicated in an animal bite or contaminated wound. Polyester is a braided suture and is contraindicated in a contaminated wound. A continuous suture would seal the wound and is contraindicated in an animal bite or contaminated wound. A natural or braided suture is contraindicated in a contaminated wound.
155. Stick tie.
156. A. Because of their density, linen packs must be placed on their side for steam sterilization.
157. D. The Sellick maneuver pushes the cricoid cartilage of the trachea into the esophagus to close it. This prevents stomach contents from entering the airway.
158. Sternocleidomastoid
159. C. Incompetent valves are located in the veins and prevent the veins from back-flowing. They also prevent dilation of smaller peripherals
160. B. Correct response; 1. True. The Bankart procedure is a treatment for anterior shoulder dislocation. 2. True. Chronic dislocation of the shoulder joint contributes to the subsequent arthritic changes. 3. False. Tightening of the infraspinatus muscle may contribute to anterior shoulder dislocation. 4. True. The Bankart procedure contributes to the restoration of joint motion.
161. B. Correct response; 1. True. Optiray-320 is a radiopaque dye used for cholangiogram. 2. True. Omnipaque-300 is a radiopaque dye used for cholangiogram. 3. False. Barium sulfate is a radiopaque dye used for upper gastrointestinal studies. 4. True. Hypaque-50 is a radiopaque dye used for cholangiogram.
162. C. Monofilament absorbable sutures are less likely to harbor bacteria within the suture prior to absorption. Monofilament sutures are less likely to harbor bacteria within the suture, but non-absorbable sutures are not typically used for deep tissue closure. They are more frequently used for repairs of vessels and fascia. Braided absorbable sutures can harbor bacteria within the fibers of the suture prior to absorption.

163. C. CAT is a medical imaging method using tomography where digital processing is used to generate a three-dimensional image of the internals of an object from a large series of two-dimensional x-ray images taken around a single axis of rotation. Ultrasonography is the utilization of high frequency sound waves that are reflected from tissues to a recording device for diagnostic purposes. Angiography is an invasive scanning procedure that allows visualization of most veins and arteries of the body following injection of a contrast medium for assessing the cause and severity of vascular disease. MRI uses magnetic force instead of radiation.

164. C. Transecting the transverse carpal ligament is routinely done during an ORIF of a distal radius. It is performed during this procedure to minimize the possibility of carpal tunnel syndrome postoperatively due to swelling.

165. B. Scalene node dissection is carried through the platysma muscle, retractors are inserted, and the scalene fat pad is identified and biopsied.

166. The size and length of the femur of the uninjured leg should be similar to the size and length of the femur prior to the acute fracture.

Practice Test 7

Answers

2011 final answers

1. E A. Ulnar nerve B. Brachial plexus C. Peroneal nerve
2. C
3. A
4. C
5. C
6. D
7. C
8. D
9. A
10. C
11. b
12. A
13. D
14. D
15. Correct: A
16. c. supraspinatus – deltoid
17. b. deltoid – axillary
18. Lenticulostriate artery
19. Foramen of Monro
20. Aqueduct of Sylvius
21. Aqueduct of Sylvius
22. pituitary
23. deltoid
24. levator ani
25. dura
26. inferior thyroid artery
27. hyaloid canal
28. sinoatrial node
29. common hepatic duct and cystic duct.

30. cecum
31. cecum
32. storage of bile
33. duodenum
34. the ampulla of Vater
35. The P wave displays atrial depolarization
36. Transversalis fascia
37. Iliohypogastric and ilioinguinal
38. Maydl's
39. sinuses of Valsalva
40. circumflex artery and a left marginal artery.
41. pronator teres
42. Colles
43. Smith
44. navicular
45. fifth metacarpal
46. Dupuytren's
47. De Quervain's
48. Glisson's capsule
49. Ampulla Vater.
50. Kupffer's
51. portal vein,
52. ligament of Treitz.
53. superior mesenteric artery
54. inferior mesenteric artery
55. nerves of Latarjet
56. Bankart
57. Talipes varus
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59. nephroblastoma,
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64. cardiac arrhythmias
65. Cisterna Chyli
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67. ligamentum teres
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69. femur.
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104. astrocytomas
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106. trigeminal
107. vestibulocochlear
108. supraorbital and supratrochlear
109. X
110. I
111. epidural hematoma.
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158. d. abdominal aorta
159. Round ligaments
160. d. Trochlear (IV)
161. c. (VI) Facial (VII)
162. b. Osteochondritis dissecans
163. a. Chondromalacia
164. ANS: D
165. ANS: D
166. ANS: C
167. ANS: D
168. ANS: A
169. ANS: D
170. ANS: D
171. ANS: A
172. ANS: A
173. ANS: B
174. ANS: B
175. ANS: D
176. ANS: C
177. ANS: A
178. ANS: D
179. ANS: A
180. ANS: C
181. ANS: A
182. c. deltoid
183. ANS: A
184. ANS: C
185. ANS: D

186. ANS: C

187. C

188. B

189. C

190. B

191. D

192. B

193. B

194. B

195. 14. Hesslebach's Triangle: region that is medial to Deep epigastric vessels, inferiorly to the inguinal ligament and to the rectus medially. Hernias that occur here are direct. Indirect hernias occur lateral to the deep epigastric arteries.

196. Both direct and indirect hernias are the result of tears in the Transversalis fascia.

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198. Pantaloon- when both hernias are present. Richter's hernia- strangulated Maydl's- hernia that contains two loops of bowel

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204. left atrium 205. inferior vena cava 206. left common carotid artery

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212. median cricothyroid ligament 213. isthmus 214. thyroid cartilage

215. Vagus nerve 216. cervix 217. Urinary bladder 218. fundus of uterus

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222. Teres Major 223. Rhomboid Major 224. semispinalis capitis

225. levator scapulae 226. acromion 227. pectoralis major

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247. tibial collateral ligament 248. tibial collateral ligament 249. plantaris muscle

250. biceps femoris tendon 251. soleus 252. plantaris tendon 253. piriformis
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258. phrenic 259. vagus 260. recurrent laryngeal 261. superior rectal artery
262. internal iliac artery 263. sigmoid artery 264. obturator artery/nerve
265. Right colic artery 266 testicular vessels 267. left colic artery 268. ileocolic artery
269. inferior mesenteric artery 270. external iliac artery 271. superior mesenteric artery
272. middle rectal artery 273. superior vesical artery 274. internal iliac artery
275. inferior vesical/vaginal artery 276. obturator artery/nerve 277. root of mesentery
278. broad ligament 279. sigmoid mesocolon 280. round ligament

Practice Test 8

Answers

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2. C
3. A
4. C
5. C
6. D
7. C
8. D
9. A
10. C
11. b
12. A
13. D
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171. ANS: A
172. ANS: A
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