

SECTION 3 CE QUESTIONS EPISODES 18 - 22

1

EPISODES from which CE QUESTIONS
are composed...

- A. **EPISODE 18:** PATIENT CARE, PLUS
- B. **EPISODE 19:** CT NEUROLOGIC IMAGING PROCEDURES
- C. **EPISODE 20:** THORACIC IMAGING PROCEDURES
- D. **EPISODE 21:** MUSCULOSKELETAL CT IMAGING
- E. **EPISODE 22:** ABDOMEN & PELVIS CT IMAGING PROCEDURES

2

1. Which of the following statements is true?

1. The primary cause of rolling veins occurs when geriatric patients experience a decrease in connective tissue
 2. Cool temperatures cause veins to go further beneath the surface
 3. Humidity should be kept at 30% or below to prevent computer malfunction
 4. The most important scan instructions involve those concerning respiration
- a. 1 through 4
 - b. 1, 2, 4
 - c. 3, 4
 - d. 3

Ans. A

Ref. Episode 18, Slide 3, 4, 5*

2. The smaller the number, the larger the lumen of the considered IV catheter or needle.

- a. True
- b. False

Ans. A

Ref. Episode 18, Slide 12

3

3. Of those listed, which of the following is an analgesic?

1. Valium
 2. Lorazepam
 3. Dilantin
 4. Morphine
 5. Codeine
- a. 1, 2, 3
 - b. 2, 3, 4
 - c. 4, 5
 - d. 1, 4, 5

Ans. C

Ref. Episode 18, Slides 6 & 7

4. Chloral hydrate is a sedative used for children and adults during CT diagnostic procedures.

- a. True
- b. False

Ans. A

Ref. Episode 18, Slide 7

4

5. Of those listed, which of the following causes the heart rate to decrease?

1. Atrophine
2. Epinephrine
3. Heparin
4. Digitalis

- a. 1, 2
- b. 3
- c. 4
- d. 1, 4

Ans. C

Ref. Episode 18, Slide 9

6. Used to treat urticaria, Diphenhydramine HCL is an antihistamine.

- a. True
- b. False

Ans. A

Ref. Episode 18, Slide 8

5

7. With regard to injection flow rate factors which of the following statements is true?

1. As catheter length increases, the resistance to flow increases
2. As catheter cross-sectional diameter decreases, the resistance to flow decreases
3. As warming temperature increases, IV contrast viscosity decreases

- a. 1 through 3
- b. 1, 2
- c. 2, 3
- d. 1, 3

Ans. D

Ref. Episode 18, Slide 21

8. Never administer IV contrast through lines that carry insulin or heparin.

- a. True
- b. False

Ans. A

Ref. Episode 18, Slide 19

6

9. Aseptic means the equipment must be clean.

- a. True b. False

Ans. B

Ref. Episode 18, Slide 24

10. Which of the following is an indication of inflammation?

1. Pain
2. Redness
3. Heat
4. Swelling

a. 1 through 4

b. 1, 4

c. 2, 3

d. 2, 4

Ans. A

Ref. Episode 18, Slide 25

7

11. Benadryl is a(n) Anti-histamine used in the event of urticaria.

- a. true b. false

Ans. A

12. Morphine is an analgesic used to resolve hematuria.

- a. true b. false

Ans. B

13. Dilantin is used to combat seizure.

- a. true b. false

Ans. A

14. Slowing the heart rate can be accomplished with atropine.

- a. true b. false

Ans. b

8

15. Valium is an anti-convulsant and effective diuretic.

- a. true
- b. false

Ans. B

16. Digitalis can be used in the event of tachycardia.

- a. true
- b. false

Ans. A

17. Chloral hydrate is a sedative.

- a. true
- b. false

Ans. A

Ref. Episode 18, Slides 6, 7, 8, 9

9

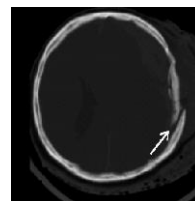
18. Which of the following will assist with the minimization of Beam Hardening streak artifact with regard to neurological imaging with CT?

1. Use very thin slices
2. Increase the kVp
3. Increase the mAs
4. Decrease filtration
5. Increase the DFOV

- a. 1, 2, 3
- b. 3, 4, 5
- c. 1, 2
- d. 4, 5

Ans. C

Ref. Episode 19, Slide 2



19. Which of the following is most likely the window width for the image seen above?

- a. 200
- b. 2500
- c. 20
- d. 250

Ans. B

Ref. Episode 19, Slide 10

10

20. With regard to the visibility of lesions in Intracerebral Hemorrhage, which of the following statements is true?

1. Hyperdensity for the 1st three days
2. Hyperdense center, hypodense, hyperdense, 4-10 days
3. Isodense center, surrounded by hypodense, 11 days-6m
4. Hypodense to normal, post 6 months

- a. 1 thru 4
- b. 2, 3
- c. 3, 4
- d. 1, 2

Ans. A

Ref. Episode 19, Slides 6 & 7

21. Which of the following is the most appropriate range of CT numbers for clotted blood?

- a. 40-50
- b. 60-110
- c. 20-30
- d. -60 to -70

Ans. B

Ref. Episode 19, Slide 9

11

22. Which of the following regarding neck CT protocols is true?

1. have the patient lower their shoulders to decrease artifact
2. use the Valsalva maneuver to distend the Pyriform Sinuses
3. Emit a prolonged "e" to demonstrate the Aryepiglottic folds
4. Align the CR with the line from the mandible to skull base

- a. 1 thru 4
- b. 1, 4
- c. 2, 3
- d. 2, 4

Ans. A

Ref. Episode 19, Slide 11

23. What percentage of the oxygen supply of the body is received by the brain?

- a. 20
- b. 25
- c. 30
- d. 50

Ans. B

Ref. Episode 19, Slide 13

12

24. Which of the following is a main arterial supplier of the brain?

1. The Iliac arteries
2. The Basilar artery
3. The Profunda complex
4. The Carotid arteries

- a. 1 thru 4 c. 2, 4
b. 1, 3 d. 2, 3

Ans. C

Ref. Episode 19, Slide 13

25. Which of the following best describes the anatomical location of the Circle of Willis?

- a. the floor of the cranial cavity c. at the inion
b. at the falx cerebri d. level of the choroid

Ans. A

Ref. Episode 19, Slide 13

13

26. Arterial blockage is the etiology for ischemic stroke.

- a. true b. false

Ans. A

27. Hypertension is the paroxysmal etiology for hypotensive stroke.

- a. true b. false

Ans. B

28. A tear in the arterial wall, causing bleeding in the brain, is the etiology of hemorrhagic stroke.

- a. true b. false

Ans. A

Episode 19, Slide 14

14

29. The deficiency of oxygen in vital tissues is the definition for ischemia.

a. True

b. False

Ans. A

Ref. Episode 19, Slide 15

15

30. With regard to ischemic stroke, a thrombus is an atherosclerotic clot.

a. true

b. false

Ans. a

31. Common sites of thrombus development are arterial bifurcations.

a. true

b. false

Ans. a

32. Neutrophil, macrophage & cytokine release into the blood are indications of thrombotic stroke.

a. true

b. false

Ans. a

33. Hardened arterial walls with decreased elasticity result from reduced nitric oxide production.

a. true

b. false

Ans. a

Ref. Episode 19, Slide 16

16

34. Which of the following is an etiology of embolic ischemic stroke?

1. artificial heart valves
2. atrial fibrillation
3. valvular disorders
4. certain wall weakening cardiomyopathies
5. fat particles

- a. 1 thru 5
- b. 1, 2, 3
- c. 3, 4, 5
- d. 2, 4, 5

Ans. A

Ref. Episode 19, Slide 16

35. Lodged emboli cause hypo-perfusion resulting in infarct which may become hemorrhagic should the blockage move and reperfusion follows.

- a. True
- b. False

Ans. A

Ref. Episode 19, Slide 17

17

36. By definition, lacunae are small areas of hollowed out tissue due to infarct.

- a. True
- B. False

Ans. A

Ref. Episode 19, Slide 18

37. Atherosclerotic changes that impact the small arteries that perfuse the deep cerebral white matter tissues is the etiology for lacunar ischemic stroke.

- a. True
- B. False

Ans. A

Ref. Episode 19, Slide 18

38. In the event of a lacunar stroke, resupply via the Circle of Willis is not possible.

- a. True
- B. False

Ans. A

Ref. Episode 19, Slide 18

18

39. Which of the following is a type of hemorrhagic stroke?

1. intracerebral
2. subarachnoid
3. arteriovenous malformation
4. hypotensive
5. ischemic

- a. 1 thru 5
- b. 2, 3, 4
- c. 3, 4
- d. 1, 2, 3, 4

Ans. D

Ref. Episode 19, Slide 19

40. Hemorrhagic stroke occurs when a blood vessel ruptures.

- a. True
- b. False

Ans. A

Ref. Episode 19, Slide 19

19

41. The arachnoid is the middle meningeal layer.

- a. true
- b. false

Ans. A

42. The pia mater is the innermost meningeal layer.

- a. true
- b. false

Ans. A

43. The dura mater is the outermost meningeal layer.

- a. true
- b. false

Ans. A

Ref. Episode 19, Slide 20

20

44. CSF is located within the sub-arachnoid space.

- a. True b. False

Ans. A

Ref. Episode 19, Slide 20

21

45. That hypertension is a very common etiology is most likely associated with which of the following?

- a. lacunar stroke
b. ischemic stroke
c. hemorrhagic stroke
d. arteriovenous malformation

Ans. C

Ref. Episode 19, Slide 21

46. Which of the following actually occurs as a result of a venous bleed?

- a. sub-dural c. extra-dural
b. sub-arachnoid d. hypotensive

Ans. A

Ref. Episode 19, Slides 24*

22

47. Which of the following is a reversible episode of focal neurologic dysfunction lasting from a few minutes to a few hours?

- a. hemorrhagic stroke
- b. lacunar stroke
- c. transient ischemic attack
- d. ischemic stroke

Ans. C

Ref. Episode 19, Slide 27

48. The symptom described as, “like a shade being pulled down” over the vision of the right eye would usually involve TIA with which of the following vessels?

- a. right external carotid
- b. right internal carotid
- c. right vertebral
- d. basilar

Ans. B

Ref. Episode 19, Slide 29

23

49. Which of the following is the most common site of TIA?

- a. basilar artery
- b. celiac axis
- c. vertebral artery
- d. carotid artery

Ans. D

Ref. Episode 19, Slide 29

50. Which of the following stroke risk factors contributes to 70% of all strokes?

- a. hypertension
- b. diabetes mellitus
- c. obesity
- d. atrial fibrillation

Ans. A

Ref. Episode 19, Slide 31

24

51. In the event of acute ischemic stroke, tissue plasminogen factor must be administered within which of the following time frames?

- a. 1 hour
- b. 3 hours
- c. 5 hours
- d. 2.5 hours

Ans. B

Ref. Episode 19, Slide 35

52. Completing a brain perfusion study is accomplished with which of the following CT modes?

- a. Axial
- b. Helical
- c. Scanogram
- d. Dynamic

Ans. D

Ref. Episode 19, Slide 37*

25

53. Which of the following is the foramen located between the lateral ventricles and the 3rd ventricle?

- a. Lushka
- b. Monro
- c. Magendie
- d. Cisterna Magna

Ans. B

Ref. Episode 19, Slide 47

54. Which of the following CT procedures of the temporal bone are protocolled to be performed with IV contrast?

1. Presbycusis
2. Cholesteatoma
3. IAC tumor
4. Fracture

- a. 1 thru 4
- b. 2, 4
- c. 1, 3
- d. 2, 3

Ans. C

Ref. Episode 19, Slide 56

26

55. Which of the following is a clinical indication for the performance of paranasal sinus CT?

1. confirm inflammation
2. performed without IV contrast
3. utilize accurately annotated coronal images

- | | |
|-------------|---------|
| a. 1 thru 3 | c. 1, 3 |
| b. 2, 3 | d. 1, 2 |

Ans. A

Ref. Episode 19, Slide 57

For questions 56 – 57: Use A for true and B for false.

56. _____ For post-myelographic CT , allowing an imaging delay of 1 to 3 hours helps to avoid artifact from dense contrast media.

Ans. A

Ref. Episode 19, Slide 54

27

57. _____ Rolling the patient prior to CT scanning will assist with mixing the contrast and forcing the contrast into nerve root endings.

Ans. A

Ref. Episode 19, Slide 54

58. Which of the following is a vessel that originates from the brachiocephalic in the neck?

- | | |
|---------------------------|--------------------|
| 1. right subclavian | 4. right vertebral |
| 2. left subclavian | 5. right jugular |
| 3. right internal carotid | |

- | | |
|-------------|------------|
| a. 1 thru 5 | c. 2, 4, 5 |
| b. 2, 3, 4 | d. 1, 4 |

Ans. D

Ref. Episode 19, Slide 62

28

59. Which of the following is a vessel that contributes to the Circle of Willis?

- 1. right internal carotid
- 2. left external carotid
- 3. right vertebral
- 4. basilar
- 5. either jugular

- a. 1 thru 5
- b. 1, 4
- c. 2, 3, 4
- d. 1, 4, 5

Ans. B

Ref. Episode 19, Slide 64

60. Which of the following is a characteristic most closely associated with veins?

- 1. veins possess valves
- 2. veins possess more muscular walls compared to arteries
- 3. 60% of the blood volume resides within the venous system*
- 4. veins appear round and dense with IV contrast

- a. 1 thru 4
- b. 2, 4
- c. 1, 3
- d. 1, 2

Ans. C

Ref. Episode 19, Slide 67

29

61. Which of the following is most typical of infarct?

- a. hypodense
- b. isodense
- c. hyperdense
- d. none of these

Ans. A

Ref. Episode 19, Slide 72

62. Which of the following is the most common cause of intracerebral hemorrhage?

- a. trauma
- b. contra-coup
- c. tumor
- d. hypertension

Ans. D

Ref. Episode 19, Slide 98

63. Which of the following is the most common type of primary brain cancer?

- a. AVM
- b. Multiple myeloma
- c. Astrocytoma
- d. Subdural hematoma

Ans. C

Ref. Episode 19, Slide 103*

30

64. An abnormal tangle of arteries and veins without a normal intervening capillary bed best describes which of the following?

- a. aneurysm
- b. saddle embolism
- c. AVM*
- d. ligature

Ans. C

Ref. Episode 19, Slide 105

65. Which of the following most likely occurs as a result of a venous bleed?

- a. epidural
- b. subarachnoid
- c. AVM
- d. subdural

Ans. D

Ref. Episode 19, Slide 100

31

66. Which of the following is an important first step in deriving a differential diagnosis when evaluating a lytic lesion?

- a. the location of the lesion is notable
- b. noting the radiopacity of the lesion
- c. ascertain the age of the patient
- d. whether or not the patient is male or female

Ans. C

Ref. Episode 19, Slide 111

67. Which of the following is described when a diseased blood vessel within the brain bursts allowing blood to leak inside the brain?

- a. intra-cerebral hemorrhage
- b. extra-cerebral hemorrhage
- c. sub-dural hematoma
- d. epidural hematoma

Ans. A

Ref. Episode 19, Slide 108

32

For questions 68 – 71: use A for true and B for false. The subject matter is Volumetric High Resolution CT.

68. _____ The inspiratory prone position can be used to delineate small airway disease.

Ans. A

Ref. Episode 20, Slide 9

69. _____ In the inspiratory supine position, “side down” atelectasis can mimic lung disease.

Ans. A

Ref. Episode 20, Slide 9

70. _____ The expiratory prone position can be used to depict bronchiolitis and air trapping.

Ans. A

Ref. Episode 20, Slide 9

71. _____ When supine, both attenuation & vessel size increase from anterior to posterior.

Ans. A

Ref. Episode 20, Slide 9

33

For questions 72 – 75: use A for Pulmonary Artery & B for Pulmonary Vein

72. _____ Only arteries in the body that carry deoxygenated blood

Ans. A

Ref. Episode 20, Slide 13

73. _____ Carries deoxygenated blood from the right ventricle to the lungs.

Ans. A

Ref. Episode 20, Slide 13

74. _____ Bring oxygenated blood from the lungs to the left atrium.

Ans. B

Ref. Episode 20, Slide 13

75. _____ Only veins in the body that carry oxygenated blood.

Ans. B

Ref. Episode 20, Slide 13

34

76. Which of the following is an inexpensive laboratory test that indicates pulmonary embolism?

- a. Prothrombin time
- b. Partial thromboplastin time
- c. D-dimer laboratory blood test*
- d. Warfarin titer analysis

Ans. C

Ref. Episode 20, Slide 17

77. Which of the following is a branch of the left coronary artery?

- 1. left anterior descending
 - 2. the ramus intermedius
 - 3. left circumflex
 - 4. posterior descending
- a. 1 thru 4
 - b. 1, 3
 - c. 2, 4
 - d. 1, 2, 3

Ans. D

Ref. Episode 20, Slide 23

35

78. Which of the following is a group of drugs used to lower beats per minute and to regulate cardiac rhythm?

- a. antibiotics
- b. blood thinners
- c. Beta blocker drugs
- d. IV contrast media*

Ans. C

Ref. Episode 20, Slide 28

79. Which of the following is an important factor impacting maximum vessel opacification during pulmonary embolism CT?

- 1. patient age
 - 2. cardiac output
 - 3. lung disease
 - 4. catheter position placement
- a. 1 thru 4
 - b. 2
 - c. 2, 4
 - d. 1, 3

Ans. A

Ref. Episode 20, Slide 34

36

80. Which of the following is a drug whose function is to dilate vessels to improve visualization?

- a. epinephrine
- b. nitroglycerin
- c. norepinephrine
- d. atrophine

Ans. B

Ref. Episode 20, Slide 35

81. Relative to the ECG, which of the following waves is most closely associated with the least cardiac motion?

Ref. Episode 19, Slide 20

- a. P
- b. Q
- c. R
- d. S

Ans. A

Ref. Episode 20, Slide 36

37

82. Retrospective gating is a low dose procedure.

- a. true
- b. false

Ans. B

83. Continuous acquisition better describes prospective gating.

- a. true
- b. false

Ans. B

84. With retrospective gating, cine loops are generated.

- a. true
- b. false

Ans. A

85. Retrospective gating is used for CT calcium scoring.

- a. true
- b. false

Ans. B

Ref. Episode 20, slide 54

38

86. With which of the following is PITCH not relative?

- a. Retrospective gating
- b. Cine loop imaging
- c. Prospective gating
- d. A CT runoff procedure

Ans. C

Ref. Episode 20, Slide 56

39

87. In general, any poorly defined opacity in the lung of unknown etiology is the definition for infiltrate.

- a. True
- b. False

Ans. A

Ref. Episode 20, Slide 75

88. With regard to general imaging principles in musculoskeletal CT, patients are positioned so that patient sides are symmetric.

- a. True
- b. False

89. With regard to general imaging principles in musculoskeletal CT, lower extremities are scanned with the patient prone and feet first into the gantry.

- a. True
- b. False

90. With regard to general imaging principles in musculoskeletal CT, upper extremities are scanned with the patient supine and head first into the gantry.

- a. True
- b. False

40

91. With regard to general imaging principles in musculoskeletal CT, when scanning long bones, the plane of the CT slice should be parallel to the long axis.

- a. True b. False

92. With regard to general imaging principles in musculoskeletal CT, if a fracture is seen on cross-section, 3D reformations are often performed.

- a. True b. False

Ans. A

Ref. Episode 21, Slides 3, 4

41

93. Performing wrist CT with the wrist positioned on the abdomen is the position of choice.

- a. True b. False

Ans. B

Ref. Episode 21, Slide 8

94. Which of the following is the anchor regarding the bones of the wrist?

- a. hamate c. trapezoid
b. scaphoid d. capitate

Ans. D

Ref. Episode 21, Slide 10

42

95. Obtaining thin, axial slices from above the AC joint inferiorly through the glenoid fossa is the protocol of choice for trauma shoulder.

- a. True b. False

Ans. A

Ref. Episode 21, Slide 14

96. The DFOV for CT of the foot should include which of the following?

1. the forefoot
2. the hindfoot
3. the midfoot

- a. 1 thru 3 c. 2, 3
b. 1, 2 d. 1, 3

Ans. A

Ref. Episode 21, Slide 20

43

97. In the foot, the navicular is medial, while the cuboid is lateral.

- a. True b. False

Ans. A

Ref. Episode 21, Slide 22

98. Which of the following is NOT a hip bone?

- a. Ilium c. femoral head*
b. Ischium d. pubis

Ans. C

Ref. Episode 21, Slide 26

99. Relative to the interrogation of soft tissue structures, CT is the modality of choice.

- a. True b. False

Ans. B

Ref. Episode 21, Slide 27

44

100. Whether it be dilute barium or dilute water soluble contrast the key volume to maximize bowel opacity is most likely which of the following?

- a. 2000 mL
- b. 1500 mL
- c. 600 mL
- d. 500 mL

Ans. C; Ref. Episode 22, Slide 5

101. With which of the following body areas must the closest attention be paid regarding patient prep?

- a. head scan
- b. body scan
- c. thoracic scan
- d. abdomen & pelvis scan

Ans. D; Ref. Episode 22, Slide 5

45

For questions 102 – 105, Use A for True and B for False.

102. The most common indication for rectal contrast administration is colon cancer screening.

- a. True
- b. False

Ans. A

103. The bladder is best appreciated on CT when filled with either contrast or urine.

- a. True
- b. False

Ans. A

104. Identification of the vaginal canal is best accomplished with the insertion of a tampon.

- a. True
- b. False

Ans. A

105. Liver windows are 150 WW and 70 WL.

- a. True
- b. False

Ans. A

Ref. Episode 22, Slide 8, 13*

46

106. Which of the following is the normal range of CT attenuation in unenhanced liver?

- a. 50 – 150 HU
- b. 75 – 200 HU
- c. 40 – 70 HU
- d. 10 – 30 HU

Ans. C; Ref. Episode 22, Slide 16

107. Which of the following is the best definition of fatty infiltrate involving the liver?

- 1. liver measurement is 30 HU
 - 2. the liver measures 10 HU less than the spleen
 - 3. liver measurement is 200 HU
 - 4. the spleen measures 10 HU more than the liver
- a. 1, 3
 - b. 2, 4
 - c. 1, 4
 - d. 2, 3

Ans. B; Episode 22, Slide 16

47

108. With regard to liver perfusion, what percentage is composed of arterial supply from the hepatic artery?

- a. 25%
- b. 50%
- c. 65%
- d. 75%

Ans. A; Ref. Episode 22, Slide 19

109. For routine studies of the liver, most scanning is accomplished during which of the following phases of contrast enhancement?

- a. Bolus
- b. Portal Venous
- c. Equilibrium
- d. Late arterial

Ans. B; Ref. Episode 22, Slide 19

48

110. Metastatic cancer tumors in the liver may originate from which of the following sources 50% of the time?

- a. lung
- b. kidney
- c. breast
- d. colo-rectal

Ans. D; Ref. Episode 22, Slide 21

111. Which of the following abdominal organs is located along the midline between the level of the 12th thoracic & 2nd lumbar vertebrae?

- a. kidneys
- b. liver
- c. spleen
- d. pancreas

Ans. D; Ref. Episode 22, Slide 23

49

112. Which of the following is a reason for the performance of unenhanced urinary tract CT?

1. The demonstration of calcifications
2. To determine baseline attenuation measurements
3. To develop an accurate timing delay
4. The demonstration of soft tissue dysplasia

- a. 1 thru 4
- b. 1, 2
- c. 3, 4
- d. 2, 3

Ans. B; Ref. Episode 22, Slide 32

113. Of the following, which is most influential regarding the timing of contrast enhancement in the urinary tract?

- a. patient weight
- b. BUN measurement
- c. scanner speed
- d. cardiac output

Ans. D; Episode 22, Slide 37

50

114. Which of the following occurs at 100-120 sec. post-bolus?

- a. Cortico-medullary Phase
- b. Excretory Phase
- c. Nephrogram Phase
- d. None of these

Ans. C

115. Which of the following occurs at 3-16 min post-bolus?

- a. Cortico-medullary Phase
- b. Excretory Phase
- c. Nephrogram Phase
- d. All of these

Ans. B

116. With which of the following will visibility of the proximal renal parenchyma be apparent?

- a. Cortico-medullary Phase
- b. Excretory Phase
- c. Nephrogram Phase
- d. None of these

51

117. Which of the following occurs at 30-70 sec. post-bolus?

- a. Cortico-medullary Phase
- b. Excretory Phase
- c. Nephrogram Phase
- d. None of these

Ans. A

118. With which of the following are the ureters visible?

- a. Cortico-medullary Phase
- b. Excretory Phase
- c. Nephrogram Phase
- d. None of these

Ans. B

Ref. Episode 22; Slide 34

52

119. Which of the following is the most common type of urinary calculi?

- a. Uric acid
- b. Struvite
- c. Calcium salt
- d. Cystine

Ans. C; Ref. Episode 22, Slide 46

120. It's when the stone stops that it causes urinary tract pain.

- a. True
- b. False

Ans. A; Ref. Episode 22, Slide 48

121. With regard to urinary tract stones, hematuria is due to ureteral wall erosion.

- a. True
- b. False

Ans. A; Ref. Episode 22, Slide 48

53

122. Which of the following is most likely indicated when symptomatology includes severe unilateral flank pain and postural changes do not relieve the pain?

- a. Peritoneal irritation
- b. Renal colic
- c. Diverticulitis
- d. Appendicitis

Ans. B; Ref. Episode 22, Slide 49

123. Including those that are radiolucent on plain film, what percentage of urinary calculi are visualized with non-contrast helical CT?

- a. 25%
- b. 75%
- c. 85%
- d. 99%

Ans. D; Ref. Episode 22, Slide 49

54

124. In the event of adrenal incidenteloma, which of the following protocol adjustments may save a repeat CT procedure?

- a. add delayed images to the protocol
- b. increase the contrast injection flow rate
- c. alter the exam delay time
- d. the development of accurate 3D images

Ans. A; Ref. Episode 22, Slide 53

125. Which of the following is a characteristic associated with the adrenal gland and malignancy?

- 1. the lesion is greater than 4 cm in diameter
 - 2. the lesion has changed size in a notable fashion
 - 3. malignant lesions have an irregular shape
 - 4. tissue-wise malignant lesions are heterogenous
 - 5. malignant lesions have a HU value less than 10
- a. 1 thru 5 c. 2, 3, 4, 5
b. 1, 3, 5 d. 1, 2, 3, 4*

Ans. D; Ref. Episode 22, Slide 56

55

126. The most common and efficacious diagnostic tool regarding acute appendicitis is most likely which of the following?

- a. plain film imaging c. barium enema
- b. ultrasound d. Appendiceal CT

Ans. D; Ref. Episode 22, Slide 62

127. The physical position of the appendix greatly affects the clinical presentation of appendicitis.

- a. True b. False

Ans. A; Ref. Episode 22, Slide 63

128. Acute gynecologic conditions may mimic acute appendicitis.

- a. True b. False

Ans. A; Ref. Episode 22, Slide 63

56

129. For which of the following is pain in the left lower quadrant a common major symptom?

- a. Acute appendicitis
- b. Diverticulitis
- c. Fistula
- d. Flatulence

Ans. B; Ref. Episode 22, Slide 69

130. The abnormal development of pouches in the bowel lining is most likely the definition for which of the following?

- a. diverticulitis
- b. diverticulosis
- c. appendicitis
- d. peritoneal irritation

Ans. B; Ref. Episode 22; Slide 69

131. The Inferior Vena Cava is an important artery of the upper abdomen.

- a. True
- b. False

Ans. B; Ref. Episode 22, Slide 77*

57

132. Which of the following is a major branch of the celiac axis?

- 1. Inferior mesenteric
 - 2. Superior mesenteric
 - 3. Splenic*
 - 4. Hepatic
- a. 1 thru 4
 - b. 1, 2
 - c. 3, 4
 - d. 2, 3

Ans. C; Ref. Episode 22, Slide 78

133. Which of the following is a major contributing vessel to the Portal Vein?

- 1. Superior mesenteric artery
 - 2. Inferior mesenteric vein
 - 3. Splenic artery
 - 4. Gastro-splenic vein
- a. 1 thru 4
 - b. 1, 3
 - c. 2, 4
 - d. 2, 3

Ans. C; Ref. Episode 22, Slide 85

58

134. Which of the following serves as a connection between the SVC and IVC?

- a. the azygos artery
- b. the hemi-azygos artery
- c. the azygos vein
- d. the hemi-azygos vein

Ans. C; Ref. Episode 22, Slide 84

135. Which of the following is recognized as the main artery of the pelvis?

- a. the internal iliac arteries
- b. the internal iliac veins
- c. the external iliac arteries
- d. the external iliac veins

Ans. A; Ref. Episode 22, Slide 93