

**READING HOSPITAL SCHOOL OF HEALTH SCIENCES
MEDICAL IMAGING PROGRAM
CROSS SECTIONAL ANATOMY—2022**

*Complete and submit this study guide to Taryn via e-mail **by 9/28/22 10:00AM***

*****Please click on the box next to each question to insert your answer.***

**Chest/Circulatory System Anatomy Review
70 points**

1. This type of circulation is when oxygen depleted blood is pumped away from the heart to the lungs.
2. List the 3 parts of the sternum and their location in reference to the thoracic cage. (6 pts)
3. This portion of the aorta passes anterior to the lumbar in the posterior abdomen and divides around the level of L4 in to the 2 common iliac arteries.
4. This structure forms the upper boundary of the chest and upper portion of the shoulder girdle and includes the SC and AC joint.
5. How does the right lung differ from the left lung?
6. What two major joints are associated with the clavicles? (2pts)
7. Describe the difference between the pulmonary and systemic parts of the circulatory system. (2pts)
8. The superior and inferior vena cava empties into the:
9. What are the three parts of the thoracic aorta **and** list their locations? (6pts)
10. In an axial image of the chest, which chamber of the heart would be located most anteriorly?

11. The spinous process is connected to the transverse process of the vertebra by the _____.
12. The route of blood from the heart through the lungs and back to the heart would be classified as what type of circuit?

13. The _____ lines the inside of the chest musculoskeletal wall and the _____ lines the surface of the lungs to form a smooth lubricated surface for movement resulting from breathing.
14. What type of blood is carried by the pulmonary veins?
15. Name the portion of the scapula that is located on the anterior surface and is inferior to the clavicle providing attachment for the pectoralis muscle.
16. What are the two kinds of joints between the ribs and the thoracic spine? (2pts)
17. What is the name of the tough, fibrous sac that surrounds the heart?
18. The systemic circuit distributes blood to all parts of the body except:
19. This structure is a thick connective tissue membrane that surrounds the region between the lungs, containing the heart, great vessels and bronchial tree.
20. Which chamber of the heart lies most posteriorly?
21. What joints are associated with the sternum? (2pts)
22. These small vessels form the network between the arterioles and venules.
23. Where is the trachea located in relation to the esophagus?
24. True or False? All arteries carry blood away from the heart.

25. The _____ forms the floor for the chest and separates the thoracic and abdominal cavities.
26. This portion of the scapula in location is more lateral and helps form the socket for the humeral head.
27. Explain the difference between the locations of the apex of the heart versus the base.
28. Identify the portion of the thoracic vertebra that forms the lateral walls of the vertebral foramen and connects the body of the vertebra to the transverse process.
29. These are considered the collecting vessels that bring blood back to the heart.
30. What is the name of the tracheal bifurcation, and where does it usually appear?
31. The ascending aorta originates from what part of the heart?
32. The large trunk artery that distributes blood to the whole body (except the lungs) and originates from the left ventricle:
33. What are the three arterial (oxygenated blood) branches off of the aortic arch? (3pts)
34. List the location of the heart within the thoracic cavity.
35. Identify the portion of the thoracic vertebra that is a bony projection of bone that extends posteriorly from the right and left lamina.
36. At what level does the abdominal aorta divide into two common iliac arteries?
37. This is an elongated flat bone that forms the anterior wall of the thoracic cage.
38. The abdominal aorta divides into what two branches?

39. True or False? The pulmonary arteries carry deoxygenated blood.
40. The superior vena cava drains blood from:
41. These are the smallest branches of arteries that then divide into capillaries.
42. List the first main branch off of the aortic arch and its 2 divisions.(3pts)
43. This structure extends from each lung and enters into the left atrium carrying oxygenated blood to the heart.
44. The ____ is the region of the medial aspect near the center of both the right and left lungs, and is the site where the bronchi, veins, and arteries enter and exit the lungs next to the heart.
45. Describe the location of the left subclavian artery.
46. The inferior vena cava drains blood from:
47. This structure originates in the right ventricle and carries deoxygenated blood to the lungs.
48. This portion of the scapula projects over the top of the shoulder joint and articulates with the clavicle.
49. Which chamber of the heart pumps blood directly into the pulmonary artery?
50. Average adult contains how much blood that is being pumped throughout a persons body?
51. ____ carry blood away from the heart and are broken down into 2 main trunk branches, Aorta and Pulmonary trunk.
52. Identify the parts of the vertebral arch within a thoracic vertebra