

Advanced MCQs – Blood Vessels & Circulation

Questions

1. Which sequence correctly represents pulmonary circulation starting from the heart?
A. Right atrium → Right ventricle → Pulmonary trunk → Pulmonary arteries → Lung capillaries
B. Right ventricle → Right atrium → Pulmonary trunk → Lung capillaries
C. Left ventricle → Pulmonary trunk → Lung capillaries
D. Right atrium → Pulmonary veins → Lung capillaries
2. Which vessel is the only artery that carries deoxygenated blood?
A. Pulmonary vein
B. Aorta
C. Pulmonary artery
D. Coronary artery
3. Failure of the pulmonary semilunar valve would most directly affect blood flow between:
A. Right atrium and right ventricle
B. Right ventricle and pulmonary trunk
C. Left ventricle and aorta
D. Pulmonary veins and left atrium
4. All systemic venous blood ultimately returns to the heart through the:
A. Pulmonary veins
B. Portal vein
C. Superior and inferior vena cava
D. Coronary sinus only
5. Which artery arises directly from the arch of the aorta?
A. Right common carotid artery
B. Right subclavian artery
C. Left subclavian artery
D. Right coronary artery
6. The brachiocephalic trunk divides into:
A. Left subclavian and left common carotid arteries
B. Right subclavian and right common carotid arteries
C. Two coronary arteries
D. Ascending and descending aorta
7. Which structure lies closest to the internal carotid artery in the neck?
A. External jugular vein
B. Internal jugular vein and vagus nerve
C. Subclavian vein
D. Vertebral artery
8. The carotid pulse is palpated at the level of:
A. Cricoid cartilage
B. Upper border of the thyroid cartilage
C. Jugular notch
D. Mandible angle
9. Venous blood from the brain drains directly into the:
A. External jugular vein

- B. Subclavian vein
- C. Internal jugular vein
- D. Brachiocephalic artery

10. Which vein is formed by the union of the internal jugular and subclavian veins?

- A. Superior vena cava
- B. Axillary vein
- C. Brachiocephalic vein
- D. Coronary sinus

11. The axillary artery becomes the brachial artery when it passes:

- A. Lateral border of first rib
- B. Surgical neck of humerus
- C. Lower border of teres major
- D. Cubital fossa

12. The most superficial artery at the wrist commonly used to assess pulse is the:

- A. Ulnar artery
- B. Radial artery
- C. Brachial artery
- D. Axillary artery

13. The radial and ulnar arteries contribute to the formation of:

- A. Coronary arches
- B. Carotid sinuses
- C. Superficial and deep palmar arches
- D. Portal circulation

14. Which vein is most commonly used for venipuncture?

- A. Cephalic vein
- B. Basilic vein
- C. Median cubital vein
- D. Axillary vein

15. The abdominal aorta begins at the level of:

- A. T8
- B. T10
- C. T12
- D. L4

16. Which artery supplies the adrenal (suprarenal) glands?

- A. Renal artery
- B. Inferior mesenteric artery
- C. Suprarenal arteries
- D. Celiac trunk

17. Which arteries primarily supply the digestive organs in the abdomen?

- A. Renal and suprarenal arteries
- B. Celiac trunk, superior and inferior mesenteric arteries
- C. Common iliac arteries
- D. Lumbar arteries

18. Blood from the digestive organs first passes through the liver via the:

- A. Inferior vena cava
- B. Hepatic vein
- C. Portal vein
- D. Superior mesenteric vein

19. The abdominal aorta terminates by dividing into:
- A. Renal arteries
 - B. External iliac arteries
 - C. Two common iliac arteries
 - D. Femoral arteries
20. The femoral artery becomes the popliteal artery at the level of the:
- A. Hip joint
 - B. Thigh
 - C. Knee joint
 - D. Ankle
21. Which vein drains into the femoral vein?
- A. Small saphenous vein
 - B. Great saphenous vein
 - C. Popliteal vein
 - D. External iliac vein
22. The small saphenous vein drains into the:
- A. Femoral vein
 - B. External iliac vein
 - C. Popliteal vein
 - D. Inferior vena cava
23. Which coronary artery branch supplies the anterior interventricular region?
- A. Marginal branch
 - B. Circumflex branch
 - C. Posterior interventricular branch
 - D. Anterior interventricular (LAD)
24. Venous blood from the myocardium primarily drains into the:
- A. Pulmonary veins
 - B. Superior vena cava
 - C. Coronary sinus
 - D. Inferior vena cava
25. Anastomosis in coronary circulation is important because it:
- A. Prevents valve degeneration
 - B. Allows collateral circulation
 - C. Increases blood pressure
 - D. Separates oxygenated blood
26. Which vein runs vertically on the right side of the thorax?
- A. Left brachiocephalic vein
 - B. Right brachiocephalic vein
 - C. Superior vena cava
 - D. Subclavian vein
27. Which artery is closely related to the scalenus anterior muscle?
- A. Common carotid artery
 - B. Subclavian artery
 - C. Axillary artery
 - D. Vertebral artery
28. Which vessel carries oxygenated blood from the lungs to the heart?
- A. Pulmonary artery
 - B. Pulmonary vein
 - C. Superior vena cava

D. Bronchial artery

29. The inferior vena cava passes through the diaphragm at the level of:

- A. T8
- B. T10
- C. T12
- D. L1

30. Damage to the vagus nerve in the neck is most likely associated with injury to which vessel?

- A. External carotid artery
- B. Internal carotid artery
- C. Subclavian artery
- D. Vertebral artery

Answer Key

1. A
2. C
3. B
4. C
5. C
6. B
7. B
8. B
9. C
10. C
11. C
12. B
13. C
14. C
15. C
16. C
17. B
18. C
19. C
20. C
21. B
22. C
23. D
24. C
25. B
26. B
27. B
28. B
29. A
30. B