

Practice Questions Ch 7 & 8: Updated 11/18/22

- All arteries of the body contain oxygen-rich blood with the exception of the
A. aorta. B. pulmonary artery. C. renal artery. D. coronary arteries.
- The "lub" (S1) or first heart sound, is produced by the closing of the
A. aortic semilunar valve. D. bicuspid valve.
B. pulmonary semilunar valve. E. tricuspid and bicuspid valves.
C. tricuspid valve F. aortic and pulmonary semilunar valves.
- The first heart sound is produced at the
A. beginning of systole. B. end of systole. C. beginning of diastole. D. end of diastole.
- The QRS wave of an EKG is produced by
A. depolarization of the atria. C. depolarization of the ventricles.
B. repolarization of the atria. D. repolarization of the ventricles.
- The P-wave of an EKG is produced by
A. depolarization of the atria. C. depolarization of the ventricles.
B. repolarization of the atria. D. repolarization of the ventricles.
- The second heart sound (S2 or "dub") immediately follows the occurrence of
A. the P-wave. B. the QRS wave. C. the T-wave.
- An ischemic injury to the heart that destroys myocardial cells is
A. angina pectoris. B. myocardial infarction. C. fibrillation D. heart block.
- Antibodies against both type A and B antigens are found in the blood of a person who is
A. type A. B. type B. C. type AB. D. type O.
- Production of which of the following blood cells is stimulated by a hormone secreted by the kidneys?
A. Lymphocytes C. Erythrocytes
B. Monocytes D. Neutrophils
- During diastole the ventricles are
A. relaxed and filling. B. contracting C. depolarizing
- A type of anemia resulting from low dietary vitamin B12.
A. Renal B. Fe⁺ deficiency C. Pernicious D. Aplastic E. Hemophilia
- Which type of WBC is found in the most abundance in the blood?
A. Lymphocytes B. Monocytes C. Eosinophils D. Neutrophils E. Basophils
- Which of the following would be an appropriate treatment to lower heart rate in a patient with tachycardia and also asthma?
A. Aldosterone B. ACE inhibitors C. Propanolol D. Atenolol E. Digitalis

14. Which of the following would be an appropriate treatment to increase heart rate in a patient with bradycardia?
- A. Na⁺ channel blockers
 - B. Ca²⁺ channel blockers
 - C. Propanolol
 - D. Atenolol
 - E. Digitalis
15. Which of the following could explain an abnormally high RBC hematocrit?
- A. Anemia
 - B. Bleeding
 - C. Dehydration
 - D. Low erythropoietin
 - E. Overhydration
16. According to the Frank Starling law of the heart, the strength of ventricular contraction is
- A. directly proportional to the end diastolic volume (EDV).
 - B. inversely proportional to the EDV.
 - C. independent of the EDV.
17. In the absence of compensation by changes in heart rate, stroke volume will decrease when
- A. blood volume increases.
 - B. venous return increases.
 - C. contractility increases.
 - D. contractility decreases
 - E. None of these.
18. Aldosterone acts to
- A. increase urine volume.
 - B. increase blood volume.
 - C. increase total peripheral resistance in arteries.
 - D. produces all of these effects.
19. The korotcoff sounds are produced by
- A. closing of the semilunar valves.
 - B. closing of the tricuspid and bicuspid valves.
 - C. the flow of blood through an artery.
 - D. the flow of blood through a vein.
20. Increased heart rate during exercise is primarily due to the effects of
- A. α -adrenergic stimulation.
 - B. β 2-adrenergic stimulation.
 - C. β 1-adrenergic stimulation.
 - D. muscarinic-cholinergic stimulation.
 - E. β 2-cholinergic stimulation.
 - F. β 1-cholinergic stimulation.
21. An increase in blood volume and decreased osmolarity (perhaps from drinking too much water) will cause
- A. increased ADH secretion by the hypothalamus.
 - B. increased renin secretion by the JGA.
 - C. decreased ADH secretion by the hypothalamus.
 - D. increased ANP secretion by the heart.
 - E. increased aldosterone secretion by adrenal cortex.
 - F. both answers C and D
 - G. both answers A and B
22. Baroreceptors in the aortic arch and carotid sinus
- A. stimulate hypothalamic ADH release.
 - B. stimulate a sympathetic or parasympathetic response from the medulla's cardiac center.
 - C. stimulate renin release by the JGA.
 - D. stimulate erythropoietin release by the kidneys.

23. Angiotensin 2

- A. stimulates conversion of angiotensinogen into angiotensin 1.
- B. stimulates renin release by the JGA.
- C. stimulates aldosterone release by the adrenal cortex.
- D. activates ACE in the lungs.
- E. stimulates ADH release.

24. Which organ converts angiotensinogen into angiotensin 1?

- A. JGA
- B. Hypothalamus
- C. Adrenal cortex
- D. Lungs
- E. Liver
- F. Kidneys

25. Increased blood osmolarity stimulates

- A. Oxytocin release.
- B. ADH release.
- C. Renin release.
- D. ANP release.

26. A septal defect in the heart where there is a hole is between the left and right atrium.

- A. Ventricular septal defect
- B. Patent ductus arteriosus
- C. Patent foramen ovale

27. Decreased renal artery blood pressure stimulates

- A. Oxytocin release.
- B. ADH release.
- C. Renin release.
- D. ANP release.

28. As end diastolic volume increases

- A. stroke volume decreases.
- B. stroke volume increases.
- C. cardiac output decreases.
- D. cardiac output increases.
- E. contractility decreases
- F. contractility increases
- G. answers A, C, and E.
- H. answers B, D, and F.

29. Parasympathetic decrease of the heart's pacemaker cell depolarization involves

- A. α -adrenergic stimulation.
- B. β 2-adrenergic stimulation.
- C. β 1-adrenergic stimulation.
- D. muscarinic-cholinergic stimulation.
- E. β 2-cholinergic stimulation.
- F. β 1-cholinergic stimulation.

30. If total peripheral resistance increases, cardiac output will _____.

- A. increase
- B. decrease
- C. remain the same

Ch 10. Answers:

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

How did you do?