

# Blood Practice Questions

Student: \_\_\_\_\_

1. The hematocrit is the volume of a blood sample made up of
  - A. white blood cells.
  - B. platelets.
  - C. red blood cells.
  - D. plasma.
2. Fifty-five percent of blood is
  - A. plasma.
  - B. organic molecules.
  - C. blood cells.
  - D. formed elements.
3. The formed elements of blood consist of
  - A. red blood cells.
  - B. white blood cells.
  - C. platelets.
  - D. All of the choices are correct.
4. Blood transports
  - A. oxygen.
  - B. glucose.
  - C. carbon dioxide.
  - D. All of the choices are correct.
5. Which of the following is a defensive function of blood?
  - A. engulfing and destroying pathogens
  - B. distributing heat around the body
  - C. delivery of nutrients to cells
  - D. regulating pH
6. Which components of blood do NOT perform the defensive functions of blood?
  - A. platelets
  - B. antibodies
  - C. white blood cells
  - D. red blood cells
7. The process of blood cell formation is called
  - A. coagulation.
  - B. hemostasis.
  - C. hematopoiesis.
  - D. blood typing
8. Where does the process of hematopoiesis occur in the adult?
  - A. yellow bone marrow
  - B. red bone marrow
  - C. liver
  - D. spleen
9. Red blood cells are also known as
  - A. leukocytes.
  - B. thrombocytes.
  - C. multipotent stem cells.
  - D. erythrocytes.

10. The main component of a red blood cell is
  - A. fibrinogen.
  - B. albumin.
  - C. hemoglobin.
  - D. globulin.
11. When the oxygen content of the blood is low, \_\_\_\_\_ is released by the kidneys to increase red blood cell production in the red bone marrow.
  - A. renin
  - B. erythropoietin
  - C. prothrombin
  - D. aldosterone
12. When erythrocytes are broken down, the heme group is excreted as
  - A. amino acids.
  - B. iron.
  - C. bile pigments.
  - D. erythropoietin.
13. \_\_\_\_\_ is an increased rate of red blood cell destruction.
  - A. Hemolytic anemia
  - B. Sickle-cell disease
  - C. Pernicious anemia
  - D. Aplastic anemia
14. \_\_\_\_\_ is a genetic blood disease.
  - A. Hemolytic anemia
  - B. Aplastic anemia
  - C. Pernicious anemia
  - D. Sickle-cell disease
15. \_\_\_\_\_ is a blood disorder caused by the lack of vitamin B-12.
  - A. Pernicious anemia
  - B. Polycythemia
  - C. Sickle-cell disease
  - D. Hemolytic anemia
16. Which of the following is NOT a function of leukocytes?
  - A. They destroy dead or dying body cells.
  - B. They fight infection.
  - C. They take oxygen to cells.
  - D. They recognize and kill cancer cells.
17. Which of the following is NOT a granular leukocyte?
  - A. eosinophil
  - B. monocyte
  - C. neutrophil
  - D. basophil
18. Which type of white blood cell is the first to respond to an infection?
  - A. neutrophil
  - B. eosinophil
  - C. monocyte
  - D. basophil

19. Which type of leukocyte has granules that release histamine and heparin?
- A. basophil
  - B. lymphocyte
  - C. monocyte
  - D. neutrophil
20. Leukemia involves
- A. uncontrolled production of abnormal white blood cells.
  - B. a viral infection.
  - C. a bacterial infection.
  - D. a decrease in leukocyte production.
21. Which type of white blood cell has the largest percentage in a blood sample?
- A. neutrophils
  - B. basophils
  - C. eosinophils
  - D. lymphocytes
22. Which type of leukocyte will enlarge in the tissues and become macrophages?
- A. lymphocytes
  - B. eosinophils
  - C. neutrophils
  - D. monocytes
23. What is needed for hemostasis?
- A. platelets
  - B. proteins
  - C. vitamin K
  - D. All of the choices are correct.
24. The \_\_\_\_\_ mechanism for activation of clotting comes from the blood.
- A. intrinsic
  - B. extrinsic
25. The extrinsic mechanism for activation of clotting comes from the
- A. external environment.
  - B. damaged tissue.
  - C. blood.
  - D. central nervous system.
26. Which of the following is the correct order of events of coagulation?
- (1) thrombin converts fibrinogen to fibrin
  - (2) fibrin strands form the clot
  - (3) prothrombin activator is formed
  - (4) prothrombin converted to thrombin
- A. 3, 4, 1, 2
  - B. 2, 1, 4, 3
  - C. 1, 2, 3, 4
  - D. 4, 1, 2, 3
27. What vitamin is needed for the formation of prothrombin by the liver?
- A. vitamin K
  - B. vitamin B-12
  - C. vitamin A
  - D. vitamin C

28. What chemical will dissolve fibrin to remove a blood clot?
- A. thrombin
  - B. plasmin
  - C. serum
  - D. prothrombin
29. What can help prevent clots from forming in undamaged blood vessels?
- A. heparin from basophils and mast cells
  - B. smooth endothelium of blood vessel walls
  - C. prothrombin activator
  - D. Both heparin and a smooth endothelium are correct.
30. A blood condition due to the lack of one or more clotting factors is
- A. hemophilia.
  - B. embolus.
  - C. thrombus.
  - D. thrombocytopenia.
31. Blood type is determined by
- A. antigens on red blood cells.
  - B. antibodies on red blood cells.
  - C. antibodies in the plasma.
  - D. antigens in the plasma.
32. A person with blood type A has which antigen?
- A. A
  - B. B
  - C. A and B
  - D. neither A nor B
33. A person with blood type B has which antibodies?
- A. no antibodies
  - B. anti-A
  - C. anti-A and anti-B
  - D. anti-B
34. A person with type AB blood has \_\_\_\_\_ antigens.
- A. A
  - B. B
  - C. both A and B
  - D. no
35. A person with type O blood has \_\_\_\_\_ antibodies.
- A. anti-A
  - B. anti-B
  - C. both anti-A and anti-B
  - D. no
36. Which blood type is considered the universal donor type?
- A. Type AB
  - B. Type O
  - C. Type B
  - D. Type A
37. Why is Type AB blood considered the universal recipient?
- A. It has both antibodies in the plasma.
  - B. It has no antibodies in the plasma.
  - C. It has no antigens on the red blood cells.

38. Mr. Jones has Type A blood and needs a transfusion. What type(s) could he safely be given?
- A. Type A only
  - B. Type A or Type AB
  - C. Type A or Type O
  - D. Type O only
39. Mrs. Smith needs a blood transfusion. She has Type O blood. What type(s) could she safely be given?
- A. Type O only
  - B. Type A, Type B, Type AB, or Type O
  - C. Type AB and Type O
  - D. Type AB only
40. When could an Rh-negative person get antibodies to the Rh antigen?
- A. at birth
  - B. an Rh-negative person will never get antibodies
  - C. when exposed to Rh antigen
41. Which could result in hemolytic disease of the newborn?
- A. mother Rh-; father Rh-; baby Rh+
  - B. mother Rh-; father Rh+; baby Rh+
  - C. mother Rh+; father Rh-; baby Rh--
  - D. mother Rh+; father Rh+; baby Rh--
42. White blood cells defend the body against pathogens.  
True    False
43. Mature red blood cells are capable of mitosis.  
True    False
44. Platelets in a damaged blood vessel can adhere to each other and exposed collagen fibers.  
True    False
45. Cross-matching blood is important before a transfusion is given because there are other blood antigens that could cause agglutination.  
True    False
46. Worn-out red blood cells are removed from circulation by the \_\_\_\_\_ and \_\_\_\_\_.
- A. liver; spleen
  - B. kidneys; thymus gland
  - C. spleen; kidneys
  - D. liver; kidneys
47. A large majority of the proteins found in plasma are produced by the \_\_\_\_\_.
- A. lungs
  - B. spleen
  - C. liver
  - D. kidneys
48. The hemoglobin within erythrocytes plays a major role in the transport of \_\_\_\_\_ by the blood.
- A. hormones
  - B. oxygen
  - C. hydrogen ions
  - D. carbon dioxide

49. A decrease in blood oxygen increases the release of \_\_\_\_\_ from kidneys and liver, and it stimulates the production of \_\_\_\_\_ by red bone marrow.
- A. folic acid; erythrocytes
  - B. erythropoietin; erythrocytes
  - C. folic acid; leukocytes
  - D. erythropoietin; leukocytes
50. \_\_\_\_\_ are the blood cells that help provide a defense against disease organisms.
- A. Leukocytes
  - B. Both leukocytes and erythrocytes
  - C. Erythrocytes
  - D. Platelets
51. \_\_\_\_\_ form a temporary plug to stop bleeding in a broken blood vessel.
- A. Monocytes
  - B. Neutrophils
  - C. Platelets
  - D. Basophils
52. The enzyme \_\_\_\_\_ converts fibrinogen into strands of \_\_\_\_\_, which form a blood clot.
- A. thromboplastin; thrombin
  - B. thrombin; fibrin
  - C. prothrombin activator; fibrin
  - D. prostaglandin; prothrombin
53. Two organs that help detect low blood cell numbers and produce hormones to correct this are the \_\_\_\_\_ and \_\_\_\_\_.
- A. bone marrow and gall bladder
  - B. kidney and liver
  - C. liver and spleen
  - D. brainstem and heart
54. Platelets become sticky and adhere to each other when exposed to:
- A. heparin.
  - B. collagen in connective tissues.
  - C. fibrinogen.
  - D. positively charged endothelial cells.
55. Which of the following is the correct sequence of clotting proteins?
- A. Fibrinogen, fibrin, prothrombin, thrombin.
  - B. Prothrombin, thrombin, fibrinogen, fibrin.
  - C. Prothrombin, thrombin, prothrombin activator, fibrin.
  - D. Fibrin, thrombin, prothrombin, fibrinogen.
56. A piece of a clot that moves from where it formed and can block another vessel elsewhere is termed \_\_\_\_\_.
- A. embocyte
  - B. thrombocyte
  - C. embolus
  - D. thrombus
57. The protein responsible for helping break down clots after they are no longer needed is \_\_\_\_\_.
- A. tissue plasminogen activator
  - B. hemoglobin
  - C. albumin
  - D. prothrombin activator

58. Which of the following are actually cell fragments and not whole cells?
- A. RBCs
  - B. WBCs
  - C. globulins
  - D. platelets
  - E. albumins
59. How many globin chains are found in hemoglobin?
- A. 0
  - B. 1
  - C. 2
  - D. 3
  - E. 4
60. If your skin and the whites of your eyes appear yellow, what is not being excreted?
- A. carbon dioxide
  - B. carbonic acid
  - C. biocarbonate ion
  - D. heme
  - E. globin chains
61. If a person does not have enough iron in their diet, they may suffer from
- A. jaundice.
  - B. hemolysis.
  - C. blood doping.
  - D. acidosis.
  - E. anemia.
62. Red blood cells are unable to undergo mitosis.  
True    False
63. In someone with terrible allergies, what leukocyte levels would be elevated?
- A. neutrophil, eosinophil
  - B. monocyte, megakaryocyte
  - C. eosinophil, basophil
  - D. megakaryocyte, basophil
  - E. lymphocyte, monocyte

# Blood Practice Questions **Key**

1. The hematocrit is the volume of a blood sample made up of
- A. white blood cells.
  - B. platelets.
  - C.** red blood cells.
  - D. plasma.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #1  
Longenbaker: - 011 Chapter. #1  
Section: 11.01  
Topic: Cardiovascular System*

2. Fifty-five percent of blood is
- A.** plasma.
  - B. organic molecules.
  - C. blood cells.
  - D. formed elements.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #2  
Longenbaker: - 011 Chapter. #2  
Section: 11.01  
Topic: Cardiovascular System*

3. The formed elements of blood consist of
- A. red blood cells.
  - B. white blood cells.
  - C. platelets.
  - D.** All of the choices are correct.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #3  
Longenbaker: - 011 Chapter. #3  
Section: 11.01  
Topic: Cardiovascular System*

4. Blood transports
- A. oxygen.
  - B. glucose.
  - C. carbon dioxide.
  - D.** All of the choices are correct.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #4  
Longenbaker: - 011 Chapter. #4  
Section: 11.01  
Topic: Cardiovascular System*

5. Which of the following is a defensive function of blood?
- A.** engulfing and destroying pathogens
  - B. distributing heat around the body
  - C. delivery of nutrients to cells
  - D. regulating pH

*Blooms Level: Remember  
Longenbaker - Chapter 11 #5  
Longenbaker: - 011 Chapter. #5  
Section: 11.01  
Topic: Cardiovascular System*

6. Which components of blood do NOT perform the defensive functions of blood?
- A. platelets
  - B. antibodies
  - C. white blood cells
  - D.** red blood cells

*Blooms Level: Remember  
Longenbaker - Chapter 11 #6  
Longenbaker: - 011 Chapter.  
Section: 11.01  
Topic: Cardiovascular System*



7. The process of blood cell formation is called  
A. coagulation.  
B. hemostasis.  
**C. hematopoiesis.**  
D. blood typing

*Blooms Level: Remember  
Longenbaker - Chapter 11 #12  
Longenbaker: - 011 Chapter. #10  
Section: 11.02  
Topic: Cardiovascular System*

8. Where does the process of hematopoiesis occur in the adult?  
A. yellow bone marrow  
**B. red bone marrow**  
C. liver  
D. spleen

*Blooms Level: Remember  
Longenbaker - Chapter 11 #13  
Longenbaker: - 011 Chapter. #11  
Section: 11.02  
Topic: Cardiovascular System*

9. Red blood cells are also known as  
A. leukocytes.  
B. thrombocytes.  
C. multipotent stem cells.  
**D. erythrocytes.**

*Blooms Level: Remember  
Longenbaker - Chapter 11 #16  
Longenbaker: - 011 Chapter. #13  
Section: 11.02  
Topic: Cardiovascular System*

10. The main component of a red blood cell is  
A. fibrinogen.  
B. albumin.  
**C. hemoglobin.**  
D. globulin.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #17  
Longenbaker: - 011 Chapter. #14  
Section: 11.02  
Topic: Cardiovascular System*

11. When the oxygen content of the blood is low, \_\_\_\_\_ is released by the kidneys to increase red blood cell production in the red bone marrow.  
A. renin  
**B. erythropoietin**  
C. prothrombin  
D. aldosterone

*Blooms Level: Remember  
Longenbaker - Chapter 11 #19  
Longenbaker: - 011 Chapter. #16  
Section: 11.02  
Topic: Cardiovascular System*

12. When erythrocytes are broken down, the heme group is excreted as  
A. amino acids.  
B. iron.  
**C. bile pigments.**  
D. erythropoietin.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #21  
Longenbaker: - 011 Chapter. #18  
Section: 11.02  
Topic: Cardiovascular System*

13. \_\_\_\_\_ is an increased rate of red blood cell destruction.

- A.** Hemolytic anemia
- B. Sickle-cell disease
- C. Pernicious anemia
- D. Aplastic anemia

*Blooms Level: Remember  
Longenbaker - Chapter 11 #22  
Longenbaker: - 011 Chapter. #19  
Section: 11.02  
Topic: Cardiovascular System*

14. \_\_\_\_\_ is a genetic blood disease.

- A. Hemolytic anemia
- B. Aplastic anemia
- C. Pernicious anemia
- D.** Sickle-cell disease

*Blooms Level: Remember  
Longenbaker - Chapter 11 #23  
Longenbaker: - 011 Chapter. #20  
Section: 11.02  
Topic: Cardiovascular System*

15. \_\_\_\_\_ is a blood disorder caused by the lack of vitamin B-12.

- A.** Pernicious anemia
- B. Polycythemia
- C. Sickle-cell disease
- D. Hemolytic anemia

*Blooms Level: Remember  
Longenbaker - Chapter 11 #24  
Longenbaker: - 011 Chapter. #21  
Section: 11.02  
Topic: Cardiovascular System*

16. Which of the following is NOT a function of leukocytes?

- A. They destroy dead or dying body cells.
- B. They fight infection.
- C.** They take oxygen to cells.
- D. They recognize and kill cancer cells.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #27  
Longenbaker: - 011 Chapter. #24  
Section: 11.02  
Topic: Cardiovascular System*

17. Which of the following is NOT a granular leukocyte?

- A. eosinophil
- B.** monocyte
- C. neutrophil
- D. basophil

*Blooms Level: Remember  
Longenbaker - Chapter 11 #28  
Longenbaker: - 011 Chapter. #25  
Section: 11.02  
Topic: Cardiovascular System*

18. Which type of white blood cell is the first to respond to an infection?

- A.** neutrophil
- B. eosinophil
- C. monocyte
- D. basophil

*Blooms Level: Remember  
Longenbaker - Chapter 11 #29  
Longenbaker: - 011 Chapter. #26  
Section: 11.02  
Topic: Cardiovascular System*

19. Which type of leukocyte has granules that release histamine and heparin?

- A.** basophil
- B. lymphocyte
- C. monocyte
- D. neutrophil

*Blooms Level: Remember  
Longenbaker - Chapter 11 #32  
Longenbaker: - 011 Chapter. #29  
Section: 11.02  
Topic: Cardiovascular System*

20. Leukemia involves  
**A.** uncontrolled production of abnormal white blood cells.  
B. a viral infection.  
C. a bacterial infection.  
D. a decrease in leukocyte production.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #34  
Longenbaker: - 011 Chapter. #31  
Section: 11.02  
Topic: Cardiovascular System*

21. Which type of white blood cell has the largest percentage in a blood sample?

- A.** neutrophils
- B. basophils
- C. eosinophils
- D. lymphocytes

*Blooms Level: Remember  
Longenbaker - Chapter 11 #35  
Longenbaker: - 011 Chapter. #32  
Section: 11.02  
Topic: Cardiovascular System*

22. Which type of leukocyte will enlarge in the tissues and become macrophages?

- A. lymphocytes
- B. eosinophils
- C. neutrophils
- D.** monocytes

*Blooms Level: Remember  
Longenbaker - Chapter 11 #36  
Longenbaker: - 011 Chapter.  
Section: 11.02  
Topic: Cardiovascular System*

23. What is needed for hemostasis?

- A. platelets
- B. proteins
- C. vitamin K
- D.** All of the choices are correct.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #42  
Longenbaker: - 011 Chapter. #37  
Section: 11.03  
Topic: Cardiovascular System*

24. The \_\_\_\_\_ mechanism for activation of clotting comes from the blood.

- A.** intrinsic
- B. extrinsic

*Blooms Level: Remember  
Longenbaker - Chapter 11 #43  
Longenbaker: - 011 Chapter. #38  
Section: 11.03  
Topic: Cardiovascular System*

25. The extrinsic mechanism for activation of clotting comes from the  
A. external environment.  
**B.** damaged tissue.  
C. blood.  
D. central nervous system.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #44  
Longenbaker: - 011 Chapter. #39  
Section: 11.03  
Topic: Cardiovascular System*

26. Which of the following is the correct order of events of coagulation?  
(1) thrombin converts fibrinogen to fibrin  
(2) fibrin strands form the clot  
(3) prothrombin activator is formed  
(4) prothrombin converted to thrombin  
**A.** 3, 4, 1, 2  
B. 2, 1, 4, 3  
C. 1, 2, 3, 4  
D. 4, 1, 2, 3

*Blooms Level: Remember  
Longenbaker - Chapter 11 #45  
Longenbaker: - 011 Chapter. #40  
Section: 11.03  
Topic: Cardiovascular System*

27. What vitamin is needed for the formation of prothrombin by the liver?  
**A.** vitamin K  
B. vitamin B-12  
C. vitamin A  
D. vitamin C

*Blooms Level: Remember  
Longenbaker - Chapter 11 #46  
Longenbaker: - 011 Chapter. #41  
Section: 11.03  
Topic: Cardiovascular System*

28. What chemical will dissolve fibrin to remove a blood clot?  
A. thrombin  
**B.** plasmin  
C. serum  
D. prothrombin

*Blooms Level: Remember  
Longenbaker - Chapter 11 #49  
Longenbaker: - 011 Chapter.  
Section: 11.03  
Topic: Cardiovascular System*

29. What can help prevent clots from forming in undamaged blood vessels?  
A. heparin from basophils and mast cells  
B. smooth endothelium of blood vessel walls  
C. prothrombin activator  
**D.** Both heparin and a smooth endothelium are correct.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #50  
Longenbaker: - 011 Chapter.  
Section: 11.03  
Topic: Cardiovascular System*

30. A blood condition due to the lack of one or more clotting factors is  
A. hemophilia.  
B. embolus.  
C. thrombus.  
D. thrombocytopenia.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #52  
Longenbaker: - 011 Chapter. #44  
Section: 11.03  
Topic: Cardiovascular System*

31. Blood type is determined by  
A. antigens on red blood cells.  
B. antibodies on red blood cells.  
C. antibodies in the plasma.  
D. antigens in the plasma.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #55  
Longenbaker: - 011 Chapter. #56  
Section: 11.04  
Topic: Cardiovascular System*

32. A person with blood type A has which antigen?  
A. A  
B. B  
C. A and B  
D. neither A nor B

*Blooms Level: Remember  
Longenbaker - Chapter 11 #56  
Longenbaker: - 011 Chapter. #57  
Section: 11.04  
Topic: Cardiovascular System*

33. A person with blood type B has which antibodies?  
A. no antibodies  
B. anti-A  
C. anti-A and anti-B  
D. anti-B

*Blooms Level: Remember  
Longenbaker - Chapter 11 #57  
Longenbaker: - 011 Chapter. #58  
Section: 11.04  
Topic: Cardiovascular System*

34. A person with type AB blood has \_\_\_\_\_ antigens.  
A. A  
B. B  
C. both A and B  
D. no

*Blooms Level: Remember  
Longenbaker - Chapter 11 #58  
Longenbaker: - 011 Chapter.  
Section: 11.04  
Topic: Cardiovascular System*

35. A person with type O blood has \_\_\_\_\_ antibodies.  
A. anti-A  
B. anti-B  
C. both anti-A and anti-B  
D. no

*Blooms Level: Remember  
Longenbaker - Chapter 11 #59  
Longenbaker: - 011 Chapter.  
Section: 11.04  
Topic: Cardiovascular System*

36. Which blood type is considered the universal donor type?  
A. Type AB  
**B. Type O**  
C. Type B  
D. Type A

*Blooms Level: Remember  
Longenbaker - Chapter 11 #60  
Longenbaker: - 011 Chapter. #59  
Section: 11.04  
Topic: Cardiovascular System*

37. Why is Type AB blood considered the universal recipient?  
A. It has both antibodies in the plasma.  
**B. It has no antibodies in the plasma.**  
C. It has no antigens on the red blood cells.

*Blooms Level: Remember  
Longenbaker - Chapter 11 #61  
Longenbaker: - 011 Chapter. #60  
Section: 11.04  
Topic: Cardiovascular System*

38. Mr. Jones has Type A blood and needs a transfusion. What type(s) could he safely be given?  
A. Type A only  
B. Type A or Type AB  
**C. Type A or Type O**  
D. Type O only

*Blooms Level: Understand  
Longenbaker - Chapter 11 #62  
Longenbaker: - 011 Chapter. #61  
Section: 11.04  
Topic: Cardiovascular System*

39. Mrs. Smith needs a blood transfusion. She has Type O blood. What type(s) could she safely be given?  
**A. Type O only**  
B. Type A, Type B, Type AB, or Type O  
C. Type AB and Type O  
D. Type AB only

*Blooms Level: Understand  
Longenbaker - Chapter 11 #63  
Longenbaker: - 011 Chapter. #62  
Section: 11.04  
Topic: Cardiovascular System*

40. When could an Rh-negative person get antibodies to the Rh antigen?  
A. at birth  
B. an Rh-negative person will never get antibodies  
**C. when exposed to Rh antigen**

*Blooms Level: Remember  
Longenbaker - Chapter 11 #64  
Longenbaker: - 011 Chapter. #63  
Section: 11.04  
Topic: Cardiovascular System*

41. Which could result in hemolytic disease of the newborn?  
A. mother Rh-; father Rh-; baby Rh+  
**B. mother Rh-; father Rh+; baby Rh+**  
C. mother Rh+; father Rh-; baby Rh--  
D. mother Rh+; father Rh+; baby Rh--

*Blooms Level: Remember  
Longenbaker - Chapter 11 #65  
Longenbaker: - 011 Chapter. #64  
Section: 11.04  
Topic: Cardiovascular System*

42. White blood cells defend the body against pathogens.

**TRUE**

*Blooms Level: Remember  
Longenbaker - Chapter 11 #69  
Longenbaker: - 011 Chapter.  
Section: 11.01  
Topic: Cardiovascular System*

43. Mature red blood cells are capable of mitosis.

**FALSE**

*Blooms Level: Remember  
Longenbaker - Chapter 11 #70  
Longenbaker: - 011 Chapter. #66  
Section: 11.02  
Topic: Cardiovascular System*

44. Platelets in a damaged blood vessel can adhere to each other and exposed collagen fibers.

**TRUE**

*Blooms Level: Remember  
Longenbaker - Chapter 11 #77  
Longenbaker: - 011 Chapter. #67  
Section: 11.03  
Topic: Cardiovascular System*

45. Cross-matching blood is important before a transfusion is given because there are other blood antigens that could cause agglutination.

**TRUE**

*Blooms Level: Remember  
Longenbaker - Chapter 11 #78  
Longenbaker: - 011 Chapter. #69  
Section: 11.04  
Topic: Cardiovascular System*

46. Worn-out red blood cells are removed from circulation by the \_\_\_\_\_ and \_\_\_\_\_.

- A.** liver; spleen  
B. kidneys; thymus gland  
C. spleen; kidneys  
D. liver; kidneys

*Blooms Level: 1. Remember  
Gunstream - Chapter 11 #3  
Longenbaker: - 011 Chapter. #69  
Section: 11.02  
Topic: Blood*

*Learning Outcome: 11.04 Explain where production and destruction of red blood cells occur and the factors controlling these processes.*

47. A large majority of the proteins found in plasma are produced by the \_\_\_\_\_.

- A. lungs  
B. spleen  
**C.** liver  
D. kidneys

*Blooms Level: 1. Remember  
Gunstream - Chapter 11 #7  
Longenbaker: - 011 Chapter. #69  
Section: 11.05  
Topic: Blood*

*Learning Outcome: 11.09 Identify the normal components of plasma and explain their importance.*

48. The hemoglobin within erythrocytes plays a major role in the transport of \_\_\_\_\_ by the blood.

- A. hormones  
**B.** oxygen  
C. hydrogen ions  
D. carbon dioxide

*Blooms Level: 1. Remember  
Gunstream - Chapter 11 #14  
Longenbaker: - 011 Chapter. #69  
Section: 11.02  
Topic: Blood*

*Learning Outcome: 11.03 Explain the role of hemoglobin in red blood cell function.*

49. A decrease in blood oxygen increases the release of \_\_\_\_\_ from kidneys and liver, and it stimulates the production of \_\_\_\_\_ by red bone marrow.
- A. folic acid; erythrocytes
  - B. erythropoietin; erythrocytes**
  - C. folic acid; leukocytes
  - D. erythropoietin; leukocytes

Blooms Level: 1. Remember

Gunstream - Chapter 11 #13

Learning Outcome: 11.04 Explain where production and destruction of red blood cells occur and the factors controlling these processes.

Section 11.02

Topic: Blood

50. \_\_\_\_\_ are the blood cells that help provide a defense against disease organisms.
- A. Leukocytes**
  - B. Both leukocytes and erythrocytes
  - C. Erythrocytes
  - D. Platelets

Blooms Level: 1. Remember

Gunstream - Chapter 11 #15

Learning Outcome: 11.05 Describe the types of white blood cells and explain the functions of each type.

Section 11.03

Topic: Blood

51. \_\_\_\_\_ form a temporary plug to stop bleeding in a broken blood vessel.
- A. Monocytes
  - B. Neutrophils
  - C. Platelets**
  - D. Basophils

Blooms Level: 1. Remember

Gunstream - Chapter 11 #20

Learning Outcome: 11.08 Describe the function of platelets.

Section 11.04

Topic: Blood

52. The enzyme \_\_\_\_\_ converts fibrinogen into strands of \_\_\_\_\_, which form a blood clot.
- A. thromboplastin; thrombin
  - B. thrombin; fibrin**
  - C. prothrombin activator; fibrin
  - D. prostaglandin; prothrombin

Blooms Level: 2. Understand

Gunstream - Chapter 11 #21

Learning Outcome: 11.10 Describe the sequence of events in hemostasis.

Section 11.06

Topic: Blood

53. Two organs that help detect low blood cell numbers and produce hormones to correct this are the \_\_\_\_\_ and \_\_\_\_\_.
- A. bone marrow and gall bladder
  - B. kidney and liver**
  - C. liver and spleen
  - D. brainstem and heart

Blooms Level: 1. Remember

Gunstream - Chapter 11 #26

Learning Outcome: 11.04 Explain where production and destruction of red blood cells occur and the factors controlling these processes.

Section 11.02

Topic: Blood

54. Platelets become sticky and adhere to each other when exposed to:
- A. heparin.
  - B. collagen in connective tissues.**
  - C. fibrinogen.
  - D. positively charged endothelial cells.

Blooms Level: 2. Understand

Gunstream - Chapter 11 #30

Learning Outcome: 11.08 Describe the function of platelets.

Section 11.06

Topic: Blood



55. Which of the following is the correct sequence of clotting proteins?  
A. Fibrinogen, fibrin, prothrombin, thrombin.  
**B. Prothrombin, thrombin, fibrinogen, fibrin.**  
C. Prothrombin, thrombin, prothrombin activator, fibrin.  
D. Fibrin, thrombin, prothrombin, fibrinogen.

Blooms Level: 3. Apply  
Gunstream - Chapter 11 #31  
Learning Outcome: 11.10 Describe the sequence of events in hemostasis.  
Section 11.06  
Topic: Blood

56. A piece of a clot that moves from where it formed and can block another vessel elsewhere is termed \_\_\_\_\_.  
A. embocyte  
B. thrombocyte  
**C. embolus**  
D. thrombus

Blooms Level: 1. Remember  
Gunstream - Chapter 11 #33  
Learning Outcome: 11.13 Describe the major blood disorders.  
Section 11.08  
Topic: Blood

57. The protein responsible for helping break down clots after they are no longer needed is \_\_\_\_\_.  
**A. tissue plasminogen activator**  
B. hemoglobin  
C. albumin  
D. prothrombin activator

Blooms Level: 1. Remember  
Gunstream - Chapter 11 #34  
Learning Outcome: 11.10 Describe the sequence of events in hemostasis.  
Section 11.06  
Topic: Blood

58. Which of the following are actually cell fragments and not whole cells?  
A. RBCs  
B. WBCs  
C. globulins  
**D. platelets**  
E. albumins

Platelets are cell fragments of whole cells called megakaryocytes.

Blooms Level: 1. Remember  
Learning Outcome: 06.01.02 Compare the composition of formed elements and plasma in the blood.  
Mader - Chapter 06 #7  
Section: 06.01  
Topic: Cardiovascular System

59. How many globin chains are found in hemoglobin?  
A. 0  
B. 1  
C. 2  
D. 3  
**E. 4**

There are four globin chains in hemoglobin.

Blooms Level: 1. Remember  
Learning Outcome: 06.02.01 Explain the role of hemoglobin in gas transport.  
Mader - Chapter 06 #14  
Section: 06.02  
Topic: Cardiovascular System

60. If your skin and the whites of your eyes appear yellow, what is not being excreted?
- A. carbon dioxide
  - B. carbonic acid
  - C. biocarbonate ion
  - D.** heme
  - E. globin chains

This is referred to as jaundice, caused by the failure of the liver to excrete heme.

*Blooms Level: 3. Apply*  
*Learning Outcome: 06.02.03 Summarize the role of erythropoietin in red blood cell production.*  
*Mader - Chapter 06 #19*  
*Section: 06.02*  
*Topic: Cardiovascular System*

61. If a person does not have enough iron in their diet, they may suffer from
- A. jaundice.
  - B. hemolysis.
  - C. blood doping.
  - D. acidosis.
  - E.** anemia.

Anemia can be caused by an iron deficiency.

*Blooms Level: 2. Understand*  
*Learning Outcome: 06.02.03 Summarize the role of erythropoietin in red blood cell production.*  
*Mader - Chapter 06 #22*  
*Section: 06.02*  
*Topic: Cardiovascular System*

62. Red blood cells are unable to undergo mitosis.  
**TRUE**

Red blood cells do not have a nucleus so they cannot undergo mitosis.

*Blooms Level: 5. Evaluate*  
*Learning Outcome: 06.02.03 Summarize the role of erythropoietin in red blood cell production.*  
*Mader - Chapter 06 #23*  
*Section: 06.02*  
*Topic: Cardiovascular System*

63. In someone with terrible allergies, what leukocyte levels would be elevated?
- A. neutrophil, eosinophil
  - B. monocyte, megakaryocyte
  - C.** eosinophil, basophil
  - D. megakaryocyte, basophil
  - E. lymphocyte, monocyte

Eosinophils and basophils are elevated in those with allergies.

*Blooms Level: 2. Understand*  
*Learning Outcome: 06.03.01 Explain the function of white blood cells in the body.*  
*Mader - Chapter 06 #27*  
*Section: 06.03*  
*Topic: Cardiovascular System*

# Blood Practice Questions Summary

[illegible]

Learning Outcome: 06.02.01 Explain the role of hemoglobin in gas transport.	1
Learning Outcome: 06.02.03 Summarize the role of erythropoietin in red blood cell production.	3
Learning Outcome: 06.03.01 Explain the function of white blood cells in the body.	1
Learning Outcome: 11.03 Explain the role of hemoglobin in red blood cell function.	1
Learning Outcome: 11.04 Explain where production and destruction of red blood cells occur and the factors controlling these processes.	3
Learning Outcome: 11.05 Describe the types of white blood cells and explain the functions of each type.	1
Learning Outcome: 11.08 Describe the function of platelets.	2
Learning Outcome: 11.09 Identify the normal components of plasma and explain their importance.	1
Learning Outcome: 11.10 Describe the sequence of events in hemostasis.	3
Learning Outcome: 11.13 Describe the major blood disorders.	1
Longenbaker - Chapter 11	45
Longenbaker: - 011 Chapter.	7
Longenbaker: - 011 Chapter. #1	1
Longenbaker: - 011 Chapter. #10	1
Longenbaker: - 011 Chapter. #11	1
Longenbaker: - 011 Chapter. #13	1
Longenbaker: - 011 Chapter. #14	1
Longenbaker: - 011 Chapter. #16	1
Longenbaker: - 011 Chapter. #18	1
Longenbaker: - 011 Chapter. #19	1
Longenbaker: - 011 Chapter. #2	1
Longenbaker: - 011 Chapter. #20	1
Longenbaker: - 011 Chapter. #21	1
Longenbaker: - 011 Chapter. #24	1
Longenbaker: - 011 Chapter. #25	1
Longenbaker: - 011 Chapter. #26	1
Longenbaker: - 011 Chapter. #29	1
Longenbaker: - 011 Chapter. #3	1
Longenbaker: - 011 Chapter. #31	1
Longenbaker: - 011 Chapter. #32	1
Longenbaker: - 011 Chapter. #37	1
Longenbaker: - 011 Chapter. #38	1
Longenbaker: - 011 Chapter. #39	1
Longenbaker: - 011 Chapter. #4	1
Longenbaker: - 011 Chapter. #40	1
Longenbaker: - 011 Chapter. #41	1
Longenbaker: - 011 Chapter. #44	1
Longenbaker: - 011 Chapter. #5	1
Longenbaker: - 011 Chapter. #56	1
Longenbaker: - 011 Chapter. #57	1
Longenbaker: - 011 Chapter. #58	1
Longenbaker: - 011 Chapter. #59	1
Longenbaker: - 011 Chapter. #60	1
Longenbaker: - 011 Chapter. #61	1
Longenbaker: - 011 Chapter. #62	1
Longenbaker: - 011 Chapter. #63	1
Longenbaker: - 011 Chapter. #64	1
Longenbaker: - 011 Chapter. #66	1
Longenbaker: - 011 Chapter. #67	1
Longenbaker: - 011 Chapter. #69	1
Mader - Chapter 06	6
Section 11.02	4
Section 11.03	1
Section 11.04	1
Section 11.05	1
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Section: 06.01	1
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Section: 11.01	7
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