

## **Review Questions for Blood**

1. *What are the 2 main components of blood?*
2. *What kind of tissue is blood?*
3. *What serves as the matrix of blood?*
4. *What are formed elements?*
5. *What is plasma?*
6. *What are possible colors of blood and what do they indicate?*
7. *Relatively, how viscous is blood?*
8. *What accounts for blood's viscosity?*
9. *What is the relationship between viscosity and flow?*
10. *What is the normal pH range for blood?*
11. *What is the normal temperature for blood?*
12. *What is a normal blood volume for males and for females?*
13. *What are the main functions of blood?*
14. *What is distributed by blood?*
15. *What is regulated by blood?*
16. *What does pH measure?*
17. *What is an electrolyte?*
18. *What protective functions does blood serve?*
19. *What are components of blood plasma?*
20. *What % of blood is formed elements and what percentage is plasma?*
21. *What is albumin?*
22. *Where is albumin made?*
23. *What does albumin do?*
24. *What is osmotic pressure?*
25. *What are globulins?*
26. *What are some functions of globulins?*
27. *What are plasma cells?*
28. *What are antibodies?*
29. *Where are clotting proteins produced?*
30. *What are the 2 most important clotting proteins in plasma?*
31. *What are some nutrients found in plasma?*
32. *What are some electrolytes found in plasma?*
33. *What are some wastes found in plasma?*
34. *What do buffers do?*
35. *What is the size and shape of a red blood cell?*
36. *What advantages does biconcavity confer?*
37. *How many organelles are found within RBCs?*
38. *What is the primary content of RBCs?*
39. *What is the function of hemoglobin?*
40. *What is globin?*
41. *What is heme?*
42. *How many hemes per hemoglobin?*
43. *How many iron atoms per hemoglobin?*

44. *How many O<sub>2</sub> molecules carried per hemoglobin?*
45. *What is the difference between oxyhemoglobin and reduced hemoglobin (deoxyhemoglobin)?*
46. *How is hemoglobin involved in CO<sub>2</sub> transport?*
47. *What is hemopoiesis?*
48. *What is a hemocytoblast?*
49. *What is erythropoiesis?*
50. *Where do hemopoiesis and erythropoiesis occur?*
51. *Where is red bone marrow located in adults?*
52. *What is erythropoietin?*
53. *Where is EPO made?*
54. *What does EPO do?*
55. *How long does an RBC live?*
56. *Where do RBCs die?*
57. *What role do macrophages play in RBC breakdown?*
58. *What happens to the globin part of hemoglobin?*
59. *What happens to the iron in hemoglobin?*
60. *What are transferrin, ferritin, and hemosiderin?*
61. *What is bilirubin?*
62. *What role does bile play in bilirubin excretion?*
63. *Where are WBCs formed?*
64. *Where are most WBCs found?*
65. *What % of formed elements are WBCs?*
66. *What is a basic function of WBCs?*
67. *What is diapedesis?*
68. *What is positive chemotaxis?*
69. *How do WBCs move?*
70. *What are the 2 classes of WBCs and what are the leukocytes in each class?*
71. *What is Wright's stain?*
72. *What are neutrophils?*
73. *What are the characteristics of neutrophils?*
74. *What do neutrophils do?*
75. *What is an alternate name for neutrophils?*
76. *What are eosinophils?*
77. *What are the characteristics of eosinophils?*
78. *What do eosinophils do?*
79. *What are basophils?*
80. *What are the characteristics of basophils?*
81. *What do basophils do?*
82. *What are lymphocytes?*
83. *What are the characteristics of lymphocytes?*
84. *What are the classes of lymphocytes?*
85. *What do lymphocytes do?*
86. *What are monocytes?*
87. *What are the characteristics of monocytes?*
88. *What do monocytes do?*

89. *What % of WBCs is comprised of each separate type?*
90. *What is leukopoiesis and where does it occur?*
91. *What are platelets and what do they do?*
92. *What are the characteristics of platelets?*
93. *What is thrombopoiesis and where does it occur?*
94. *What is a normal # of platelets per ul of blood?*
95. *What is an alternate name for platelets?*
96. *What is hemostasis and of what processes does it consist?*
97. *What is and what are the effects of vascular spasm?*
98. *What is a platelet plug?*
99. *How does platelet plug formation occur?*
100. *What prevents platelet plugs from growing excessively large?*
101. *What is coagulation?*
102. *What are the final 3 steps of coagulation?*
103. *Where are clotting factors produced?*
104. *What metal and what vitamin are both necessary for coagulation?*
105. *What is the extrinsic path?*
106. *What is the intrinsic path?*
107. *What is the value of having 2 clotting pathways?*
108. *What is clot retraction and how does it occur?*
109. *What is fibrinolysis and how does it occur?*
110. *What are plasminogen and plasmin?*
111. *What can promote coagulation?*
112. *What can retard coagulation?*