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| **Subject: Physiology** | **Year 2022-2023** |
| **First Year** | **First term** |
| **Total Marks: 50** | **Date: 12 /1/2023** |
| **Prof. Dr. Mona A. Hussain** | **Time Allowed: Two Hours** |

**Choose the best answer:**

1. The main mechanism of homeostasis is:
2. Negative feedback mechanism
3. Positive feedback mechanism
4. Negative feedforward mechanism
5. Positive feedforward mechanism
6. Which of the following is the type of homeostatic mechanism that its response increases the stimulus
7. Negative feedback mechanism
8. Positive feedback mechanism
9. Negative feedforward mechanism
10. Positive feedforward mechanism
11. Blood coagulation is an example for:
12. Negative feedback mechanism
13. Positive feedback mechanism
14. Negative feedforward mechanism
15. Positive feedforward mechanism
16. Water balance is mainly controlled by which of the following?
17. Food intake
18. Sweating
19. Thirst
20. Urine output
21. Which of the following is an effect of parasympathetic stimulation of the heart?
22. Decrease heart rate
23. Decrease of force of contraction of ventricles
24. Increases coronary blood flow
25. Increases force of contraction of atria
26. Which of the following is a character of somatic nervous system?
27. Two neurons chain
28. Causes Excitation or inhibition
29. Secretes acetylcholine
30. Innervates cardiac muscle
31. Which of the following is the main positive ion in extracellular fluid?
32. Sodium
33. Potassium
34. Calcium
35. Magnesium
36. Which of the following is the origin of sympathetic nervous system?
37. Cervical segments of spinal cord
38. Thoracic and upper two lumbar segments of spinal cord
39. Sacral segments of spinal cord
40. Coccygeal segments
41. Which of the following is a part of the origin of parasympathetic nervous system?
42. All of the Sacral segments of spinal cord
43. Second , third and fourth sacral segments of spinal cord
44. Upper two lumbar spinal segments
45. All thoracic spinal segments
46. Which of the following is the neurotransmitter in parasympathetic nervous system?
47. Acetylcholine
48. Adrenaline
49. Noradrenaline
50. Dopamine
51. Which of the following is the functional unit of nervous system?
52. Neuron
53. Reflex action
54. Receptors
55. Centers
56. Which of the following is the structural unit of nervous system?
57. Neuron
58. Reflex action
59. Receptors
60. Centers
61. The most abundant cells in blood are which of the following?
62. Red blood cells
63. Neutrophil
64. Lymphocytes
65. Platelets
66. Which of the following is responsible for humoral immunity?
67. Neutrophil
68. Monocytes
69. T lymphocytes
70. B lymphocytes
71. Which of the following is responsible for cell mediated (cellular) immunity?
72. Neutrophil
73. Monocytes
74. T lymphocytes
75. B lymphocytes
76. Which of the following is the main positive ion in intracellular fluid?
77. Sodium
78. Potassium
79. Calcium
80. Magnesium
81. Which of the following is the main negative ion in intracellular fluid?
82. Proteins
83. Phosphate and organic anions
84. Chloride
85. HCO3
86. Which of the following is the main negative ion in extracellular fluid?
87. Proteins
88. Phosphate and organic anions
89. Chloride
90. HCO3
91. Volume of average water intake/ day is:
92. 300 mL
93. 1300 mL
94. 2300 mL
95. 3300 mL
96. Volume of average water output/ day is:
97. 300 mL
98. 1300 mL
99. 2300 mL
100. 3300 mL
101. Urine volume in average is………./day
102. 400 mL
103. 1400 mL
104. 2400 mL
105. 3000mL
106. Liver cells store iron and vitamins
107. True
108. False
109. The liver acts as blood reservoir
110. True
111. False
112. Steps of hemostasis includes which of the following?
113. Vasoconstriction
114. Platelet plug formation
115. Blood clotting
116. All of the above
117. Which of the following clotting factors is involved in external pathway of blood coagulation?
118. I
119. II
120. III
121. IV
122. Which of the following proteins forms the blood clot?
123. Thrombin
124. Prothrombin
125. Fibrin
126. Heparin
127. Which of the following is a character of innate immunity?
128. Specific
129. Improved by previous infection
130. Acquired
131. Includes stomach acid secretion
132. Erythropoietin hormone decreases formation of red blood cells
133. True
134. False

29. Renal diseases can cause anemia

A. True

B. False

30- Excessive destruction of red blood cells causes which of the following?

1. Hemorrhagic anemia
2. Hemolytic anemia
3. Aplastic anemia
4. Nutritional anemia

31- Red blood cells has a life span of……days

1. 30 days
2. 60 days
3. 90 days
4. 120 days

32- Formation of red blood cells occurs in …….. in adults:

1. Bone marrow
2. Lymph nodes
3. Thymus gland
4. Liver

33- A person with A+ blood group has which of the following?

1. Anti A in his plasma
2. B antigen on his RBCs
3. Anti RH
4. A antigen on his RBCs

34. 60% of body weight is ….

A. Intracellular fluid

B. Extracellular fluid

C. Transcellular fluid

D. Fluid

35- The average volume of plasma is:

1. 1 L
2. 2L
3. 3L
4. 5L