

BIOLOGY

BOOKS - BEYOND PUBLICATION

TRANSPORTATION - THE CIRCULATORY SYSTEM

Example

1. What is transport system? How does this

help to the organism?



2. What is the importance of transport system in the organisms?



3. What is the relationship between blood and plasma?



4. Write the differences between blood and lymph?



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5. Which type of blood vessels carry blood away from the heart?



6. What are the three main types of blood vessels in the body?



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7. Which is the largest artery in body? Why it is big in size?



8. Which blood vessel carries blood for oxidation?



9. Name the structures which are present in veins and lymph ducts and absent in arteries.



10. What is the use of platelets?

- 11. Write differences between
 - a) Systole Diastole b) Veins Arteries c) Xylem Phloem
 - a) Systole Diastole:



12. Explain the way how plants get water by osmosis through root hair?



13. What plays an important role in the absorption of water?



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14. What is root pressure? How is it useful to the plant?



15. Phloem is a food source for some animals. How can you justify this statement?



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16. Read the given para and name the parts of the heart?

"We have observed that the heart is divided into four chambers by muscular stucture. Any structure that divides two chambers is known as septum. Now let us try to name the septa

present in the heart".

The septum that divides the two atria can be



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17. Prepare a block diagram showing from water absorption by roots to transpiration by leaf?



18. What do you want to compare with the transportation in blood vesseles in man?



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19. How do you feel about transportation of water in huge trees?



20. How do you apreciate the movement of water through xylem in tall trees?



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21. Prepare a cartoon on heart beating?



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22. After reading this lesson, what precautions would you suggest to your elders about

edema?

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23. What is Edema?



24. Is the thickness of the wall of the heart uniform throughout?



25. How many chambers are present in the heart? What are they?



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26. Are all the chambers in the same size?



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27. What are the other differences could you observe between the chambers?



28. Are all the chambers connected to each other?



29. How are they connected to each other?

How are they separated?



30. Do you find any specific observation in between two chambers?



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31. What is the number of blood vessles attached to the heart?



32. Are all the blood vessels right? How many of them are rigid?



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33. Do you think that the stiffness/rigidity of blood vessel is something to do wih circulation?



34. Answer the following after reading the experiment conducted by William Harvey in textbook page no. 54 & 55.

In which blood vessels valves are found? What do you think is the function of the valves in them?



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35. Why do subcutaneous blood vessels bulge on the side away form the heart when the

hand is tied?



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36. The deep seated blood vessels bulge on the side towards the heart when tied. What do you understand from it?



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37. There are valves in the heart between atria and ventricles. Is the purpose of valves in the

veins and arteries same?



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38. After reading the experiment by Harvey fill in the following table. Use the clues/options

given in the first column.

的語	Structure / Function	Artery	Vein
1)	Thickness of walls		
	(thick / thin)		
2)	Valves (present / absent)		
3)	Capacity to retain shape		
	when blood is absent		
	(can retain / collapse)		
4)	Carry blood from (heart to		
	organs / body organs to heart)		
5)	Pressure in the vessel		
	(low / high)		
6)	Type of blood transported		
	(oxygenated / de-oxygenated)		
7)	Type of blood carried by		
	pulmonary artery		
	(de-oxygenated / oxygenated)		
8)	Type of blood carried by		
	pulmonary vein (oxygenated /		
	de-oxygenated)		



39. How many times did your pointer touch the heart?



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40. How many times did your pointer touch the heart?



41. How many times did the pointer touch the respiratory organs?



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42. Why do our legs swell?



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43. Is there anything like that in plants which corresponds to circulatory system?



44. What is the mechanism behind this?



45. Are root directly in contact with water?



46. How is water absorbed ?



47. Is there any increase in the water level?



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48. What is the role of xylem?



49. Keep your index and middle fingers in your wrist below the thumb what did you feel?



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50. How do you observe the pulse rate of classmates?



51. Now observe the pulse rate of students of your class. Take your shirt button and insert a matchstick and place it on your wrist.



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52. Now observe the pulse rate of students of your class. Take your shirt button and insert a matchstick and place it on your wrist.



53. How do you observe the pulse rate of classmates?



Watch Video Solution

54. What does the pulse rate show?



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55. At a given instant the legs of a right angled triangle are 8 inch and 6 inch respectively. The

first leg decreases at 1 inch per minute and second increases at 2 inch per minute. The rate of increasing of the area after 2 minute is



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56. How can you find out your pulse rate?



Watch Video Solution

57. Make a paper tube 10 inch long and one inch in diameter. Keep once end of it on the

chest of your friend on a pointer one inch to the lift side centre around 6 inches below from his/her neck. Keep your ear at the other end. Listen carefully and count the heart beats for a minute.

What is the relationship between the heart beat and the pulse.



58. Make a paper tube 10 inch long and one inch in diameter. Keep once end of it on the

chest of your friend on a pointer one inch to the lift side centre around 6 inches below from his/her neck. Keep your ear at the other end. Listen carefully and count the heart beats for a minute.

What is the relationship between the heart beat and the pulse.



59. How do you observe the mammalian heart?



60. How many layers are convering the heart?



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61. What is shape of human heart?



Watch Video Solution

62. What is the number of blood vessles attached to the heart?

63. Which end of the heart is broader and which end is narrow?



64. Describe the internal stsructure of heart with a neat labelled diagram.



65. Is the thickness of the wall of the heart uniform throughout?



Watch Video Solution

66. How many chambers are present in the heart of blue whale?



Watch Video Solution

67. Are all the chambers in the same size?



68. What are the other differences could you observe between the chambers?



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69. Are all the chambers connected to each other?



70. How are they connected to each other? How are they separated?



Watch Video Solution

71. What is the number of blood vessles attached to the heart?



72. Are all the blood vessels right? How many of them are rigid?



Watch Video Solution

73. Do you think that the stiffness/rigidity of blood vessel is something to do wih circulation?



74. Write your observation of blood flow in arteries and veins?



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75. How is water absorbed ?



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76. How is water absorbed into the roots?

Explain with an experiment?



77. Artery walls are very strong and elastic. Why?



78. Why do compare arteries like tree which divides into smaller and smaller branches?



79. The lumen size Is bigger in vein when compare with artery. Why?



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80. Are root directly in contact with water?



Watch Video Solution

81. What is the heart beat rate in infants between 6-12 months?





82. Why is there more pressure in artries than veins?



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83. The wall of left ventricle is thicker than the wall of the right ventricle? Give reason



Watch Video Solution 85. What factors contribute to rate of transpiration? **Watch Video Solution**

86. Name the cells that surrounds the

84. What is transpiration?



stomata?

87. What are the factors that transpiration depends on?



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88. What happens to your feet after overnight journey in sitting position without moving?



89. What is the reason for edema?



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90. What is the number of blood vessles attached to the heart?



Watch Video Solution

91. Are all the chambers connected to each other?



92. What is the number of blood vessles attached to the heart?



93. Are all the blood vessels right? How many of them are rigid?



94. What are the different types of circulation system?



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95. How many chambers are present in the heart of blue whale?



96. Where can we observe single circuit blood circulation?



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97. What is double circulation?



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98. What is a systole?



99. What is a diastole?



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100. What is cardiac cycle? How does it occur?



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101. What is the blood pressure in a normal healthy man?



102. Name the blood vessel that supplies oxygenated blood to the heart from lungs?



103. What are the two phases of the blood pressure?



104. What is the purposer of pericardial fluid?



105. What are venacava (or) caval veins?



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106. What are aorta?



107. Which atria recieves dexygenated blood from body?



Watch Video Solution

108. Which artery brings oxygenated blood to kidney?



109. How much water is used by the plants from the absorbed water?



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110. What heppens if there are no valves in the Heart?



111. Accumulation of cholesterol is not good for health. Why?



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112. What is the name of the device used to measure blood presseure?



113. What is the relationship between the heart beat and the pulse?



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114. Can we say, the pulse rate is always equal to the heart beat?



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115. How many layers are convering the heart?



116. What is shape of human heart?



Watch Video Solution

117. How does transpiration help plnats?



118. How much water is used by the plants from the absorbed water?



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119. Name the inherited diseases?



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120. Name the vitamin responsible for the coagulation of blood.



121. What does the biologist studies with the help of aphids?



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122. The normal blood pressure in man is 120/80 mm of Hg. What does 120 in this valve represent?



123. What are called blood capillaries?



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124. What is called serum?



Watch Video Solution

125. Where can we observe the protoplasmic movements called Brownian movements?





126. Name the organism which has the largest heart?



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127. Name the organism which have developed blind sac like gastrovascular cavity.



128. What is root pressure? How is it useful to the plant?



129. Why do we feel sticky of stem and leaves of a plant effected with aphids?

130. What is the function of phloem in plants?





131. What is the time taken to complete one cardiac cycle?



Watch Video Solution

132. What heppens if there are no valves in the Heart?



133. Two person's blood pressure is like this:

Ramaiah	140 / 80
Rangaiah	110 / 90

Whose Blood pressure is high? What does in indicate?



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134. Which protects the heart from shocks?



135. Which divides the heart into four parts?



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136. Name the blood vessel that supplies oxygenated blood to the heart from lungs?



Watch Video Solution

137. Name very fine the blood vessels that connect the smallest arteries and veins in our

body? **Watch Video Solution 138.** What is cardiac cycle? How does it occur? **Watch Video Solution 139.** The number of heart beats in blue whale? **Watch Video Solution**

140. What is lymph?



141. What is tissue fluid?



142. Which has taken up the function of digestion and transportation of nutrients to each and every cell of the body in cnidarians?



143. What are the first Eucoelomate animals?



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144. What is hypertension?



145. Two person's blood pressure is like this:

Ramaiah	140 / 80
Rangaiah	110 / 90

Whose Blood pressure is high? What does in indicate?



Watch Video Solution

146. What is Thalassemia?



147. What is transiocation?



Watch Video Solution

148. What is the function of Gestro vascular cavity?



Watch Video Solution

149. Why it is advised to take low amounts of salt in food?

150. Sometimes barks of the tree are damaged more than a half, even though tree is alive. How is this possible?



151. Which animals do great damage particularly to beech and sycamore?



152. Which animals are encouraged by foresters to keep down the population of vales and rabbits?



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153. Why is Rhesus factor?



154. Describe the internal stsructure of heart with a neat labelled diagram.



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155. What is sphygmomanometer?What is its use?



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156. What is cardiac cycle?

157. What is the difference between pulmonary artery and pulmonary vein?



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158. Write differences between the right atrium and the left atrium.



159. What is the reason for the Lubb- dubb sounds of the heart?



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160. What is the time taken to complete one cardiac cycle?



161. Why should we measure B.P. in the upper arm artery?



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162. Name the part that is associated with transport of water in plants?



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163. How does transpiration help plnats?



164. Is there any relation between transpiration and rainfall?



165. Which items do you take into consideration to explain the differences of arteries and veins?



166. When you know the heart pumping method in circulatory system, which issue did you remember particularly? What's the reason for that?



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167. Classify different types of blood vessels in humans. On what bases do you classify blood vessels?



168. Anil fell down while going to school, got knee injury, started bleeding. After sometime he was wondered by seeing blood clot. Why did blood clot?



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169. Neelima conducted an activity on her friends and got and following results.

,	S.No. Name		Heart beat at	Heart beat after	Pulse rate at
	1.	Jeevan	72	109	72
	2.	Raju	75	110	74
	3.	Reshma	73	111	73



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170. What activities will you do to find relation between heart beat and pulse rate?



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171. Why the heart beat rate is more after jogging?



172. A person is injured while playing on the ground. Blood is flowing continuously. What might be the reasons?



173. Where are the valves located in human heart? Write their names valves present in human heart.

Struc	cture / Function		Artery	Vein
.1:)	Thickness of walls			
	(thick / thin)			
2)	Valves (present / absent)			
3)	Capacity to retain shape			
	when blood is absent			
	(can retain / collapse)			
4)	Direction of blood flow	-		
	(heart to organs / body			
	organs to heart)			
5)	Pressure in the vessel			
	(low / high)			

174.

Veins have valves but not artries. Why?



Struc	cture / Function	Artery	Vein	
.1:)	Thickness of walls			
	(thick-/ thin)			
2)	Valves (present / absent)			
3)	Capacity to retain shape			
	when blood is absent			
	(can retain / collapse)			
4)	Direction of blood flow			
-	(heart to organs / body			
	organs to heart)			
5)	Pressure in the vessel			
	(low / high)			

175.

Write which vessel walls are thick and the use of it.



Structure / Function			Artery	Vein
1)	Thickness of walls			
	(thick / thin)			
2)	Valves (present / absent)			
3)	Capacity to retain shape			
	when blood is absent			
	(can retain / collapse)			
4)	Direction of blood flow			
	(heart to organs / body			
	organs to heart)			
5)	Pressure in the vessel			
	(low / high)		i	

Which vessel has more pressure. Why?



176.

Struc	cture / Function		Artery	Vein
.1)	Thickness of walls	-		
	(thick-/ thin)			
2)	Valves (present / absent)			
3)	Capacity to retain shape	- 1		
	when blood is absent			
	(can retain / collapse)			
4)	Direction of blood flow			
-	(heart to organs / body			
	organs to heart)			
5)	Pressure in the vessel	-		
	(low / high)			

Which vessel carries blood from heart ot organs? Write the type of blood.



178. What happens if blood platelets are absent in blood?



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Now answer the questions.

179. A is the largest artery, which starts from heart. Its supplies blood to all parts of the body B is the smallest artery which carries blood from heart to lungs.

(1) Write the names of A & B. (2) Which type of blood flows in A & b.



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180. Observe the table given below and analyse the questions.

Name of the Animal	Weight of the body	Weight of the heart	Heart beat p/m
Blue Whale	150000 kgs.	750 kgs.	7.
Elephant	3000 kgs.	12-21 kgs.	46
Man	60 - 70 kgs.	300 grms, 🚭 🔊	76 '
3 Koaltit	8 grams	0.15 grms	'· 1200

(i) What is the relation between weight of the body and weight of the heart of an animal? (ii) What is the relationship between weight of the heart and rate of heart beat?



181. Write differences between the right ventricle and the left ventricle.



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182. What is lymph?



183. How scientists prove that the food is trasnsported through the phloem?



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184. How are water and minerals transported in plants? How is food transported in plants?



185. Sometimes barks of the tree are damaged more than a half, even though tree is alive. How is this possible?



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186. Observe the given diagram. Which type of cardiac cycle does it indicate? Explain the process that happens here.



187. In human body "A" is a pumping organ. From lungs blood vessel "B" with oxygenated blood enters upper "C" Part of left chamber of the organ. When "C" chamber contracts blood flows into "D" lower left Chamber. Contracts blood is pumped to all parts of the body except lungs through blood vessel E. Deoxygenated blood from body parts is collected by blood vessel "F" and opens upper "G" right chamber. This chamber contracts blood flows "H" lower chamber. Lastly "H" contracts De-ozygenated blood sent to lungs by blood vessel "I".

What organ does 'A' represents?



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188. In human body A is a pumping organ from lungs blood vessel B with oxygenated blood enters upper C part of left chamber of the organ. When "C" chamber contracts blood flows into "D" lower left chamber. "D" chamber contracts blood is pumped to all parts of the body except lungs through blood vessel E. Deoxygenated blood from body parts is collected by blood vessel "F" and opens upper "G" right chamber. This chamber contracts blood flows into "H" lower chamber Lastly "H" contracts Deoxygenated blood sent to lungs by blood vessel "I" b) (i) B (ii)E (iii) F and (iv) I are what blood

vessels? Write their names.

189. In human body A is a pumping organ from lungs blood vessel B with oxygenated blood enters upper C part of left chamber of the organ. When "C" chamber contracts blood flows into "D" lower left chamber. "D" chamber contracts blood is pumped to all parts of the body except lungs through blood vessel E. Deoxygenated blood from body parts is collected by blood vessel "F" and opens upper "G" right chamber. This chamber contracts blood flows into "H" lower chamber. Lastly "H" contracts Deoxygenated blood sent to lungs

by blood vessel "I"

c) (i) C (ii) D are what chambers?



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190. In human body A is a pumping organ from lungs blood vessel B with oxygenated blood enters upper C part of left chamber of the organ. When "C" chamber contracts blood flows into "D" lower left chamber. "D" chamber contracts blood is pumped to all parts of the body except lungs through blood vessel E. Deoxygenated blood from body parts is collected by blood vessel "F" and opens upper "G" right chamber. This chamber contracts blood flows into "H" lower chamber. Lastly "H" contracts Deoxygenated blood sent to lungs by blood vessel "I" d) (i) G (ii) H are what chambers? write their



names.

191. Describe the internal stsructure of heart with a neat labelled diagram.



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192. What is called pumping station in human body? Expain its structure with suitable diagram.



193. What questions do you ask teacher to know about the coagulation of the blood?



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194. What questions do you ask teacher to know about the coagulation of the blood?



195. Draw T.S. of arteries and veins. Write flow of blood in between them?



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196. Write the differences between T.S. of artery, T.S. of vein and T.S. of blood capillary.



197. When you know the heart pumping method in circulatory system, which issue did you remember particularly? What's the reason for that?



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198. Classify different types of blood vessels in humans. On what bases do you classify blood vessels?

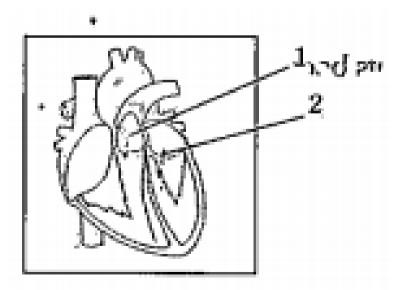


199. How will you stain a microscopic slide showing mitosis in onion roots ?



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200. Observe the given heart

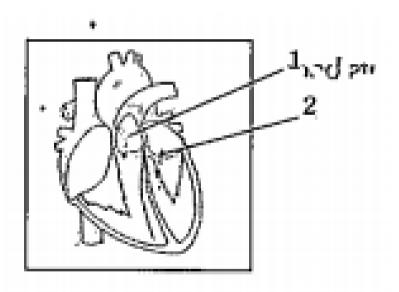


(a) Draw flow of deoxygenated blood.



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201. Observe the given heart .



c) From which blood vessels heart receives blood?



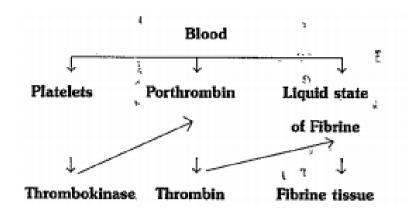
202. How did you prepare a matchstick Stethoscope in your school?



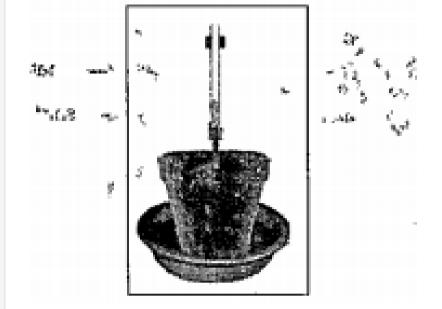
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203. The following flow chart explains the cogulation of blood in human beings. Explain

in detail.



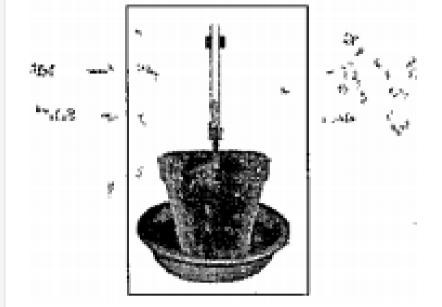




1. What is aim of this experiment?

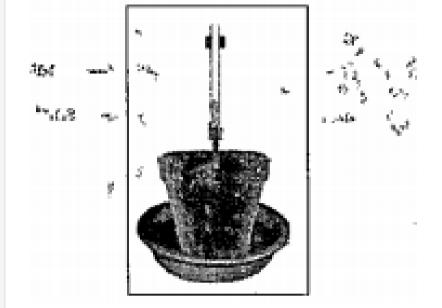


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2. What materials are required for this experiment?

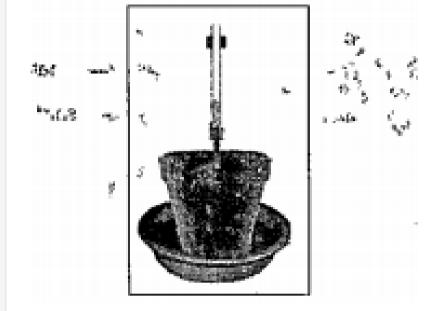




3. Why you cut the stem for this?



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4. What changes you observed in glass rod



208. How can you prove that the water transport through the xylem?



209. What is transport system? How does this help to the organism?



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210. Explain the way how plants get water by osmosis through root hair?



211. What is systemic circuit? Explain it with the help of a block diagram.



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212. Complete the following table with the details of arteries and veins.

Blood vessels	Draw figure	Thickness of the wall	Layers of the wall	Lumen size	Capacity to retain the shape
-					3
					3



213. What is the need of special tissues or organs for transport of substances in plants and animals?



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214. Write about the changes in the evolution of transport system in animals.



215. Explain the process of transport of mineral salts.



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216. How does transpiration pull help in ascent of sap?



217. Write an experiment to illustrate the conduction of sugars by phloem.



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218. What is the function of phloem in plants?



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219. Write about the changes in the evolution of transport system in animals.



220. What is the effect of Rhesus factor in childrens if RH+ persons marries RH- women?



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221. What are the components of the circulatory system in human beings? What are their functions?



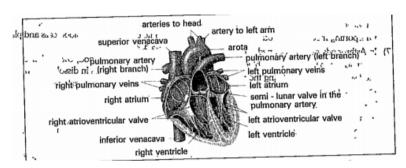
222. What was the classical experiment conducted by William Harvey to demonstrate movement of blood in veins?



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223. What was the classical experiment conducted by William Harvey to demonstrate movement of blood in veins?



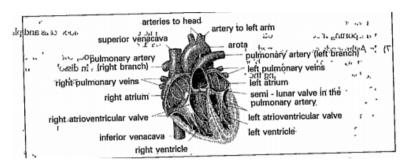


How many chambers are there in the heart?



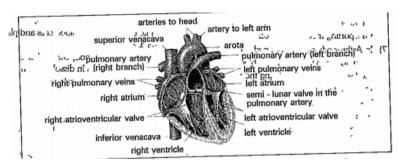
225. Do you find any specific observation in between two chambers?





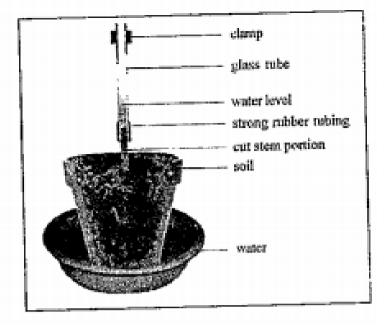
What is the function of valve?





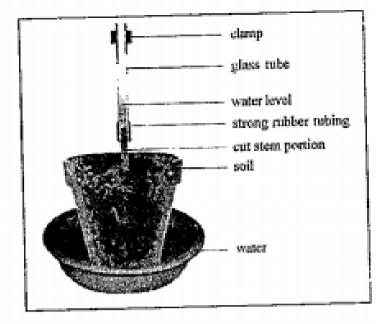
Which blood vessel is the largest one?





What is the purpose for conducting this experiment?

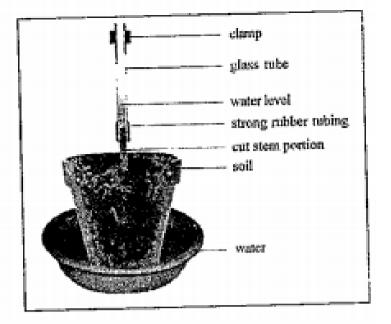




In what way root pressure is helpful for the plant?

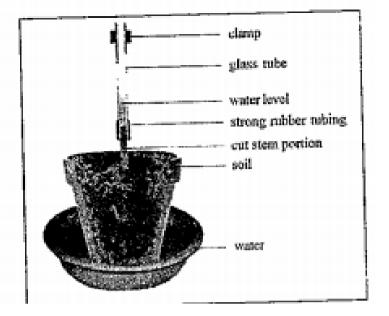


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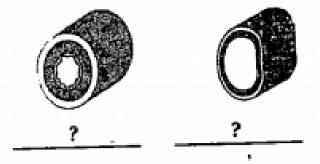
What is the tissue helpfu for the transportation of water?





What is the other process helpful for transporting water in big trees?

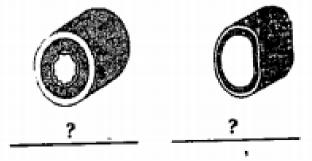




identify the names of given diagrams.



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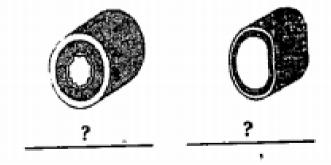


Why the wall of blood vasseles are thicker and thinner?



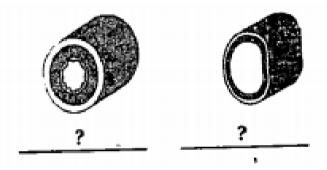
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234. Observe the diagram and answer the following questions.



valves are present in which blood vessels.





What type blood present in both the blood vessels?





1. Who invented stethoscope?



2. Before inventing stethoscope, how they hear heart beat?



3. What is the material used to make stethoscope?



4. Who coinded the name form paper/bamboo tube to hear heart beat?



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5. The term cardiac refers to which organ in the body

A. heart

B. vein

- C. lymph
- D. capillary



- **6.** On which side of the human heart is low in oxygen?
 - A. Left ventricle
 - B. right ventricle

- C. left artium
- D. right atrium



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7. Which structures of the heart control the flow of the blood?

- A. artries
- B. vein

C. valves

D. capillaries

Answer:



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8. Which of the following opinions is correct?

A. Ravi said, Xylem and phloem cells arranged one upon the other to form a tube like structure.

- B. John said, xylem and phloem are not separate tube like structures
- C. Salma said, Xylem and phloem cells connect together to form a tube like structura
- D. Hari said because of its shape they said to be tube like structures



9. An aphid pierces its proboscis into theto
get plant juices?
A. Xylem

B. Phloem

C. Camblum

D. Vascular bundle

Answer:



10. What is the function of stomata in plants?

- A. Pollination
- B. Absorpition
- C. Transportation
- D. Transpiration



11. Why	are	xylem	and	phloem	called	complex
tissues?	ı					

- A. Denrmal Tissue
- B. Simple Tissue
- C. Complex Tissue
- D. Transpiration



A. Xylem	
B. Phloem	
C. Bark	
D. Leaf	
Answer:	
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12. Sieve tubes have

13. Tracheids are seen in

- A. Xylem
- B. Phloem
- C. Bark
- D. Leaf



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14. Ascent of water and minerals through xylem in plants

- A. Xylem
- B. Phloem
- C. Camblum
- D. Stem



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15. Translocation of sucrose takes place through

- A. Xylem
- B. Phloem
- C. Camblum
- D. Stem



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16. What is the number of blood vessles attached to the heart?

- A. 4
- B. 5
- C. 6
- D. 7



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17. What is the heart beat rate in children aged between 1-10 years?

- A. 100-150
- B. 100-120
- C. 80-90
- D. 70-80



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18. Pulmonary artery which supplies deoxygenated blood to lungs arise from?

- A. Oxygenated blood
- B. Deoxygenated blood
- C. Lymph
- D. Platlets



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19. Who studied the physiology of heart for the first time?

- A. William Harvey
- B. Giralamo Fabric
- C. Malphighi
- D. Henry Watson



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20. We are the microscopic vessel made of single layer of cells. We allow diffusion of

various substances. We establish connection
between arteries and veins. Who are we?

A. Aorta

B. Atrium

C. Ventricle

D. Blood Capllaries

Answer:



21. 'The normal B.P in man is 120/80 mm/Hg"

What does 80 in the valve represent?

- A. 120/80
- B. 80/120
- C. 80/100
- D. 100/80

Answer:



22. The contraction phase of the heart
A. Systole
B. Diastol
C. Artrium
D. Aorta
Answer:
Watch Video Solution
23. Write about the nutrition in amoeba.

- A. Brownian movements
- B. Diffuison
- C. Osmosis
- D. Reverse osmosis



Watch Video Solution

24. Open type of circulatroy system is seen in all of the following except

- A. Grass-hopper
- B. Cockroach
- C. Butterfly
- D. Octopus



Watch Video Solution

25. This plays a vital link between blood and tissues

- A. Lymph
- B. RBC
- C. WBC
- D. Heart



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26. Which of these has a closed type of circulatory system?

- A. Insects B. Earthworms C. Snails D. Fish **Answer:**
- Watch Video Solution

- 27. Lymph is a part of
 - A. Digestive system

- B. Excretory system
- C. Nervous system
- D. Transport system



- 28. Animals without red blood cells
 - A. Frog
 - B. Crane

- C. Snails
- D. Earthworm



- **29.** The blood vessel that gathers blood in earthworm
 - A. Dorsal blood vessel
 - B. Ventral blood bessel

- C. Coelomic cavity
- D. Posterior venacava



Watch Video Solution

30. 13 chambered heart is present in

- A. Cockroach
- B. Leech
- C. Snails

D. Pigeon

Answer:



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31. Where can you observe the open type of circulatory system?

- A. Gills and blood
- B. Blood vessels and blood
- C. Atrium and ventricles

D. Heart, Sinus and blood

Answer:



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32. Colourless blood occurs in

- A. Lizard
- B. Earthworms
- C. Leech
- D. Fish



Watch Video Solution

33. Double circuit heart is present in

A. Fish

B. Cockroach

C. Butterfly

D. Cow

Answer:



34. Name the blood vessels that supply blood in the walls of heart?

A. Veins

B. Gills

C. Arteries

D. Trachea

Answer:



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35. The glands which secrete hormones

- A. Thyroid
- B. Digestive glands
- C. Lacremal glands
- D. Endocrine glands

Answer:



36. The colour of the blood in s	snaıl
---	-------

A. Black

B. Blue

C. Red

D. White

Answer:



37. Heart attack is caused by the blocking of

- A. Pulmonary artery
- B. Coronary artery
- C. Coronary vein
- D. Pulmonary vein

Answer:



- A. Frog
- B. Fish
- C. Reptiles
- D. Birds



39. Vencava in man opens in

- A. Right auricle
- B. Left auricle
- C. Right ventricle
- D. Left ventricle

Answer:



40. Name the blood vessel that brings oxygenated blood loaded with waste products to kidney.

- A. Pulmonary artery
- B. Postal caval in vein
- C. Coronary vein
- D. Pulmonary vein

Answer:



41. What happens if valves betwe	en left auricle
and left ventricle do not work pro	perty?

- A. Mitral
- B. Tricuspid
- C. Semi-lunar
- D. Pulmonary



42. Pulmonary aorta originates from
A. Right ventricle
B. Left ventricle
C. Right artria
D. Left artria
Answer:
Watch Video Solution



B. Right atria
C. Left atria
D. Left ventricle
Answer:
Allswei.
Watch Video Solution
44. Bicuspid valve allows blood to flow from
A. Right atria to left ventricle

A. Right ventricle

- B. Left atria to right ventricle
- C. Left ventricle to right ventricle
- D. Left atria to left ventricle



- **45.** Right atria recieves
 - A. Oxygenated blood
 - **B. Platelets**

C. Fibrin

D. Deoxygenated blood

Answer:



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46. The number of valves present at the entrance of aorta in left ventricle are

A. 2

B. 3

- C. 4
- D. 5



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47. B.P. means

- A. Atria pressure
- B. Lymph pressure
- C. Ventricular pressure

D. Blood pressure

Answer:



Watch Video Solution

48. What is shape of human heart?

A. Rectangular

B. Oval

C. Conical

D. Square



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49. Translocation of sucrose takes place through

- A. Stem
- B. Root
- C. Stomata
- D. All the above



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50. The concentration of cell sap in root hair is

A. More

B. less

C. medium

D. none

Answer:

51. Largest vein

- A. Pulmonary vien
- B. Vencava
- C. Coronary vein
- D. None

Answer:



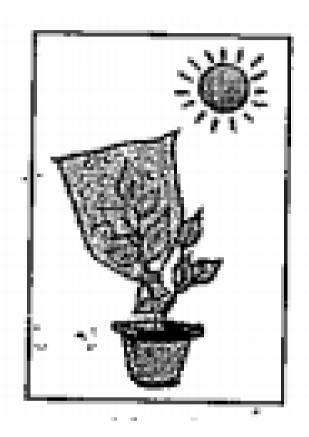
52. Pericardium is associated with

- A. Lungs
- B. Kidney
- C. Heart
- D. Brain

Answer:



53. This experiment is conducted to prove



A. Root pressure

B. Photosynthesis

C. Transpiration

D. Respiration

Answer:



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54. Name the outer protective membrane of heart?

- A. Hypercardium
- B. Pericardium
- C. Apicardium

D. Uppercardium

Answer:



Watch Video Solution

55. Name the scientist who noticed valves in the leg veins for the first time?

- A. Girolamo Fabrici
- B. William Harvey
- C. Karl Landsteiner

D. Marcello Malphigi

Answer:



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56. Doctors measure the blood pressure with a device. What is it?

- A. Sphygmomanometer
- B. Manometer
- C. Hygrometer

D. Barometer

Answer:



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57. Which of the four chambers of the human heart has the thickest muscular walls?

- A. 1 auricle 1 ventricle
- B. 2 auricles 1 ventricle
- C. 1 auricle 3 ventricle

D. 2 auricle 2 ventricle

Answer:



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58. If transportation does not take place in plants, what process will not occur?

- A. Photosynthesis
- B. Respiration
- C. Water transportation

D. Reporduction

Answer:



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59. Match the following columns

- List 1 List 2

 1. Contraction () a) 0.11-0.14 sec of auricles

 2. Contraction of () b) 0.8 sec
- 3. Cardiac cycle () c) 0.27-0.35 sec()

A. 1-a,2-b,3-c

ventricles

- B. 1-a,2-c,3-b
- C. 1-c,2-a,3-b
- D. 1-b,2-a,3-c



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60. How are water and minerals transported in plants ?

A. Xylem

- B. Phloem
- C. Vascular Bundle
- D. Stomata



- **61.** The correct order/sequence of different phases of human cardiac cycle.
 - A. Ventricle systole

- B. Auricle systole
- C. Ventricle diastole
- D. Auricle diastole



- **62.** Who invented stethoscope?
 - A. Rene Lennec
 - B. William Harvey

- C. Malphighi
- D. Fabrici



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63. What is the reason for the Lubb- dubb sounds of the heart?

- A. Closing of tricuspid and bicuspid valves
- B. Closing of aorta and pulmonary valves

- C. Blood flows rapidly through valves
- D. Flow of blood in ventricles



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64. Find the reasons for slow breathing in walking compared to running fast

- A. Normal
- B. Less than normal

- C. More than normal
- D. None of the above



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65. What is the reason for the Lubb- dubb sounds of the heart?

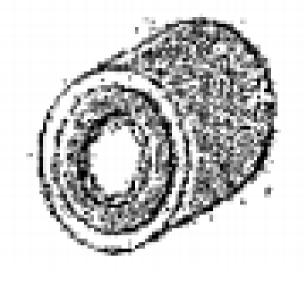
- A. Closing of valves in auricle and ventricles
- B. Closing of aorta and pulmonary valves

- C. Blood flows rapidly through valves
- D. Flow of blood in ventricles



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66. Observe the diagram and answer the questions



What

blood vessel is it?

A. Capilary

B. Artery

C. Vein

D. Lymph tubules

Answer:

67. Doctors used to hear heart beat by keeping ear on the chest later on used paper tubes and later Bamboo stick What is the apparatus and who discovered id?

- A. Stethoscope -Graham bell
- B. Kairo scope Rene Laennec
- C. Stethoscope Rene Laennec
- D. Telephone Graham bell



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68. You heared a rhythmic sound from your heart after running. That means you know that your heart is beating. Then how will your pulse be?

- A. Decreases much
- B. Remains same
- C. Beats fast

D. Equal to be heart beat.

Answer:



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69. We will get this stage if we travel overnight in the bus.......

- A. Joints pains
- B. Lack of sleeping
- C. Edema

D. Lymphima

Answer:



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70.

```
List - 1 List - 2

1. Gastro vascular ( ) a) Earthworm cavity

2. Pseudocoelomate( ) b) Round worm

3. Eucoelomate ( ) c) Jelly fish
```

- B. 1-a,2-c,3-b
- C. 1-c,2-b,3-a
- D. 1-b,2-a,3-c



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71. Brownian movement, Pseudocoelom, Eucoelom ,Trachea, Heart. Find the correct order of animals according to the transport system mentioned above.

A. Cockroach, earth worm, human, amoeba, round worm

B. Round worm,

cockroach,amoeba,human,earthworm

C. Amoeba, round worm, earth worm. cockroach,human

D. Human, earthworm, cockroach, round worm, amoeba

Answer:



72. Prothrombin $\xrightarrow{Thrombokinase}$ Thrombin- This

is a part of which reaction?

A. Transportation of oxygen

B. CO₂ acceptance

C. Formation of lymph

D. Cogulation

Answer:



73. Artries supply blood to all the body parts Walls of artries are rigid.

- A. Both a and b are true. B explains a
- B. Both a and b are false. B explains a
- C. a is true b is false
- D. a is false, b is true

Answer:



74. Write differences between the right ventricle and the left ventricle.

- A. a is true
- B. a and c only
- C. b and d true
- D. b only true

Answer:



75. Which artery brings oxygenated blood to kidney?

A. I - aorta, ii - caval vein

B. I - aorta, ii pulmonary vein

C. I - aorta, ii pulmonary artery

D. I - aorta, ii post caval vein

Answer:



76. Which of the following group, represent the correct pathway of blood flow in human body?

A) Body parts \to Left atrium \to Left ventricle \to Lungs \to Right atrium \to Right ventricle \to Aorta.

B) Body parts \to Right atrium \to Right ventricle \to Lungs \to Left atrium \to Left ventricle \to Superior vena cava.

A. Single circulation

B. Double circulation

- C. Pulmonary circulation
- D. Cardiac circulation



- **77.** a) Supply of material is done through blood vessels in closed type of circulatory system.
- b) Blood travels only in blood vesseles.

A. both a and b are true

B. a is true, b is false

C. both a anb b are false

D. a is false, b is true

Answer:



b

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78. Find out the correct statements from a and

a) The way for flow of blood (Lumen) is small in

artries.
b) The way for flow of blood (Lumen) is large in veins.

A. both a and b are true

B. a true, b is false

C. a false, b is true

D. both a and b are false

Answer:



79. a) Ventricles expand soon after filled with blood during heart beat

b) At the same time both atria come to normal stage.

A. both a and b are true

B. a is true, b is false

C. b is true, a is false

D. both a and b are false

Answer:



80. a) Root hairs influlence the movement of water upto the terminal part of plant.

b) Root pressure and osmosis help in upward movement of water.

A. both a and b are true

B. a is true, b is false

C. b is true, a is false

D. both a and b are false

Answer:

81. Is there any relation between transpiration and rainfall?

- A. Both a and b are true. B explains a
- B. a is true, a explains b

each

- C. both a and b are false. B explains a
- D. both a and b are false. Both don't explain



- **82.** a) Root hairs influeence the movement of water upto the terminal part of plant.
- b) Root pressure and osmosis help in upward movement of water.
 - A. both a and b are true
 - B. a is true, b is false
 - C. a is false b is true

D. both a and b are false

Answer:



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83. Name the mamals that scratch the bark of trees to get food stored in the phloem?

A. both a and b are true

B. a true, b is false

C. a false, b is true

D. a, b both are false

Answer:



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84. What is the reason for the heart beat?

- A. Closing of tricuspid and bicuspid valves
- B. Closing of aorta and pulmonary valves
- C. Blood flows rapidly through valves
- D. Flow of blood in ventricles



- **85.** Which of the following statements are true?
- 1) Arteries have thick walls.
- 2) Arteries carry blood from heart to body parts.
- 3) Arteries have low blood pressure.
- 4) Pulmonary artery carries Oxygenated blood.

- A. 1,2
- B. 1,3,4
- C. 2,3
- D. 1,3



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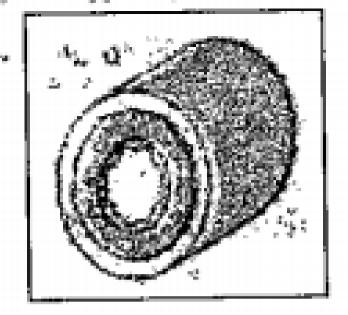
86. What percaution do you take while conducting the experiment on root pressure?

- A. Root pressure
- **B.** Water Viscocity
- C. Percentage of soil
- D. Level of water



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87. The following diagram has thick wall and less lumen What blood vessel is it?



A. Capilary

B. Artery

C. Vein

D. Muscular vessel

Answer:

88. What is cardiac cycle?

A. Ventricle systole

B. Auricle systole

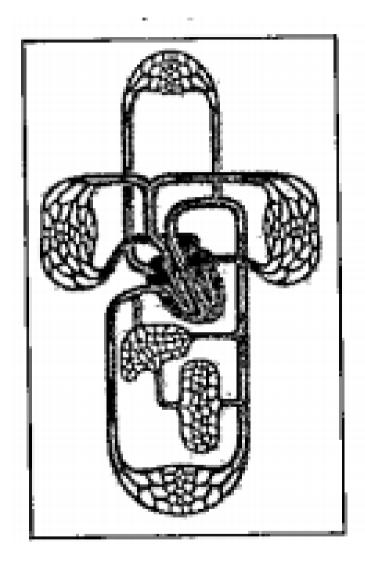
C. Ventricle diastole

D. Auricle diastolr

Answer:



89. The given picture explains



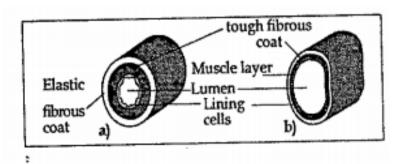
A. Single circulatory system

- B. Multi circulatory system
- C. Double circulatory system
- D. Tri circulatory system



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90. Which of the following is vein?



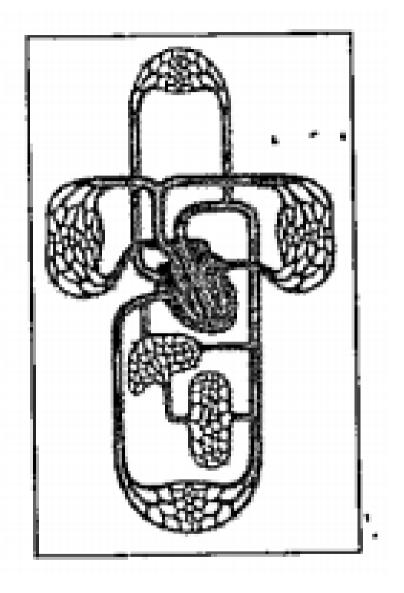
- A. a
- B.b
- C. a and b
- D. None of these



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91. The following picture indicates the double circulation in pulmonary circulation which

parts mainly purifies the blood?



A. Lungs

- B. Heart
- C. Vancava
- D. Aorta



Watch Video Solution

92. Which of the following has closed circulatory system?

A. Earthworm

- C. Hair
- D. Blood

Answer:



- **94.** Which of the following doesn't have valves?
 - A. Veins
 - B. Lymph tubes
 - C. Arteries

D. Blood cells

Answer:



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95. Which of the following is formed due to the interatrial septum?

- A. Right left auricles
- B. Right left ventricles
- C. Right ventricle, right auricle

D. Right auricle, left ventricle

Answer:



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96. The layer that encloses lungs are called plura. Likewise the layer that covers heart is called

A. Hypercardium

B. Pericardium

- C. Epicardium
- D. Uppercardium

Answer:



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97. The process involved in transpiration

- A. Stomata
- B. Xylem
- C. Vascular Bundle

D. Lenticles.

Answer:



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98. Why arteries are rigid? Give reasons



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99. What is the normal heart beat rate is adults?



100. Aorta which supplies oxygenated blood to the body parts arise from?



101. Write about the changes in the evolution of transport system in animals.



102. When the valves between the artria and ventricle are closed forcibly we listen the sound of heart as

- A. Lub
- B. dub
- C. lub-dub
- D. tub

Answer:



103. Paeudocoelom has taken up the function of collection and distribution of food materials. In which organisms you can oberve this?

A. Platyhelmenthes

B. Nematyhelmenthes

C. Annelids

D. Arthropods

Answer:



104. Name the mamals that scratch the bark of trees to get food stored in the phloem?

- A. Wolves
- B. Rabbits
- C. Wolves and Rabbits
- D. Hawks

Answer:



105. When does the heart beat start in the human embryo?

- A. 21^{st} day
- $\mathsf{B.}\,22^{nd}\,\mathsf{day}$
- $\mathsf{C.}\ 20^{th}$
- D. 23^{rd}

Answer:



106. What is the time taken for the supply of 1ml of blood from heart to a foot and back in human beings?

- A. 60 Minute
- B. 60 Hours
- C. 60 Seconds
- D. 60 Years

Answer:



107. Lymph is the substance that contains

- A. Blood with solid particles
- B. Blood without solid particles
- C. Blood with liquid particles
- D. Blood wihtout liquid particles

Answer:



108. What plays an important role in the absorption of water?

- A. Osmosis
- B. Diffuison
- C. Transpiration
- D. Root pressure

Answer:



109. Cardiac output means, the amount of blood pumped out in

- A. Two times the weight of a man
- B. Three times the weight of a man
- C. Four times the weight of a man
- D. Equal to the weight of a man

Answer:



110.	Marcell	о Ма	lpighi	studied	and
disco	vered	the	micro	blood	vessels
called	db				

- A. Insects
- B. Crow
- C. Bats
- D. Parrot

Answer:



111. Hypertension is due to

- A. Constant strain and stress
- B. Improper functioning of kidneys
- C. Smoking and alcohol consumption
- D. All the above

Answer:



112. What are the first Eucoelomate animals?

- A. Platyhelmenthes
- B. Nematyhelmenthes
- C. Annelids
- D. Arthropods

Answer:



113. The septum that divides the two ventricles can be named as......

- A. inter atrial septum
- B. Intra atrial septum
- C. Right atrial septum
- D. Left atrial septum

Answer:



114. Gastrovascular cavity is developed in animals like

- A. Sponges
- B. Hydra
- C. Jelly fish
- D. Both B and C

Answer:

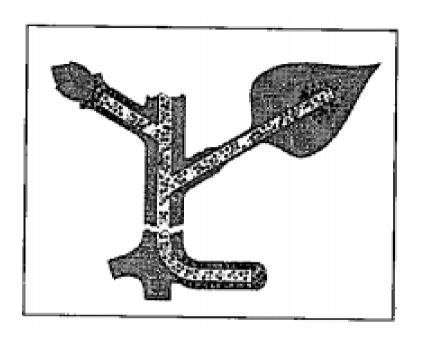


115. B.P. will change according to the activity

- A. Resting
- B. Walking
- C. Running
- D. All the above

Answer:





- A. Transpiration
- B. Respiration
- C. Transportation
- D. Photosynthesis

Answer:



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117. Write about the role of Thrombokinase in clotting of blood.



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118. I am an enzyme. I secreted from the blood platelets. I start the process of blood coagulation. Who am I?



119. 'The normal B.P in man is 120/80 mm/Hg" What does 80 in the valve represent?



120. Write the self defence system in the bodies of animals and plants.



121. How scientists prove that the food is trasnsported through the phloem?

