

TRANSPORT

1. Which of the following processes does need energy?

(A) Diffusion **(B)** Facilitated diffusion

(C) Osmosis **(D)** Active transport

2. The movement of minerals or water through plasomdesmata is called:

(A) Symplast **(B)** Apoplast

(C) Vascular **(D)** None the above

3. The movement of minerals or water through extracellular pathway is called:

(A) Symplast **(B)** Apoplast

(C) Vascular **(D)** None the above

4. The membrane of vacuole is called:

(A) Plasma membrane **(B)** Tonoplast

(C) Epidermis **(D)** None of the above

5. Casparian strips are present in:

(A) Epidermis **(B)** Endodermis

(C) Cortex **(D)** Vascular bundle

6. The total kinetic energy of the water molecules is called:

(A) Water potential **(B)** Pressure potential

(C) Osmotic potential **(D)** None of the above

7. The pressure exerted by protoplast against the cell wall of the plant cells is called:

(A) Water potential **(B)** Pressure potential

(C) Osmotic potential **(D)** None of the above

8. The upward movement of sap through the xylem is:

(A) Ascent of sap **(B)** Plasmolysis

(C) Deplasmolysis **(D)** Guttation

9. Which of the followings is mismatched for ascent of sap?

(A) Cohesion tension **(B)** Water potential

(C) Root pressure **(D)** Imbibition

10. The attraction between the water molecules and cell wall of xylem is called:

(A) Cohesion **(B)** Tension

(C) Adhesion **(D)** None of above

11. The attraction among the water molecules is:

(A) Cohesion **(B)** Tension

(C) Adhesion **(D)** None of above

12. The evaporation of water from the aerial parts of the plants is called:

(A) Ascent of sap **(B)** Plasmolysis

(C) Deplasmolysis **(D)** Plasmolysis

13. The loss of liquid through the hydathodes is called:

(A) Ascent of sap **(B)** Plasmolysis

(C) Deplasmolysis **(D)** Guttation

14. The absorption of water by a compound without dissolving in it is called:

(A) Ascent of sap **(B)** Plasmolysis

(C) Imbibition **(D)** Guttation

15. The flow of sap from cut plants is:

(A) Bleeding **(B)** Plasmolysis

(C) Imbibition **(D)** Guttation

16. Which of the following transpirations is 90% of the total transpiration?

(A) Cuticular **(B)** Lenticular

(C) Stomatal **(D)** None of above

17. Starch sugar hypothesis was proposed by:

(A) Dixon **(B)** Mohi

(C) Sanger **(D)** Drebs

18. Which of the following elements has role in the opening and closing of stomata:

(A) K **(B)** Mg

(C) Cu **(D)** Fe

19. The hormone which is involved in the opening and closing of stomata is:

(A) Citric acid **(B)** Oxaloacetic acid

(C) Abscisic acid **(D)** None of above

20. The stomata are closed at temperature (in centigrade):

(A) 35 **(B)** 45

(C) 25 **(D)** 15

21. Which of the following cells is absent in the phloem?

(A) Companion cell **(B)** Sieve tube members

(C) Vessels **(D)** Parenchyma

22. Which of the followings cannot become sink during translocation?

(A) Root **(B)** Fruits

(C) Stem **(D)** Leaves

23. Pressure flow theory was proposed by:

(A) Dixon **(B)** Mohl

(C) Sanger **(D)** Munch

24. Intestinal coeca are present in:

(A) Hydra **(B)** Planarian

(C) Cockroach **(D)** None the above

25. Which of the followings is irrelevant for the circulatory system of cockroach?

(A) Heart **(B)** Ventral Blood vessel

(C) Aorta **(D)** Dorsal blood vessel

26. Number of hearts in earthworm are:

(A) 5 **(B)** 6

(C) 7 **(D)** 8

27. Which of the following arteries supply blood to heart muscles?

(A) Pulmonary **(B)** Coronary

(C) Systemic **(D)** None the above

28. The proximal swollen part of the heart of fish is:

(A) Sinus venous **(B)** Atrium

(C) Ventricle **(D)** Conus arteriosus

29. Which of the followings is irrelevant for the heart of amphibians?

(A) Right auricle **(B)** Truncus arteriosus

(C) Right ventricle **(D)** Sinus venosus

30. The vein which brings back blood from all the body is:

(A) Pulmonary **(B)** Systemic

(C) Precavel / Postcavel **(D)** None the above

31. The percentage of plasma in the blood is:

(A) 45 **(B)** 50

(C) 55 **(D)** 65

32. The pH of blood is:

(A) 6.4 **(B)** 7

(C) 7.4 **(D)** 8.4

33. Which of the following proteins acts as catalyst in the process of protein synthesis?

(A) Antibodies **(B)** Prothrombin

(C) Fibrinogen **(D)** None the above

34. Which of the following is mismatched in the followings about RBC?

(A) Haemoglobin **(B)** Bone marrow

(C) Transport of oxygen **(D)** Fibrinogen

35. Which of the followings is not granulocyte?

(A) Neutrophils **(B)** Eosinophils

(C) Basophils **(D)** Monocytes

36. Which of the following RBCs destroy the small particles by phagocytosis?

(A) Neutrophils **(B)** Eosinophil

(C) Basophil **(D)** Monocyte

37. Which of the following compounds destroy the nucleic acid of the invading organism?

(A) Fibrinogen **(B)** Interferon

(C) Heparin **(D)** Histamine

38. Match platelets with one of the followings:

(A) Fibrinogen **(B)** Interferon

(C) Heparin **(D)** Histamine

39. Maintaining of the internal condition constant is:

(A) Buffer **(B)** Homeostasis

(C) Osmoregulation **(D)** None the above

40. Match leucaemia with one of the followings:

(A) RBC **(B)** WBC

(C) Platelets **(D)** Interferon

41. The chemical which maintain the acid base concentration is:

(A) Buffer **(B)** Homeostasis

(C) Osmoregulation **(D)** None the above

42. Match thalassaemia with one of the followings:

(A) RBC **(B)** WBC

(C) Platelets **(D)** Interferon

43. Match microcytes with one of the followings:

(A) RBC **(B)** WBC

(C) Platelets **(D)** Interferon

44. The presence of excessive fluid in the tissue is:

(A) Thalasseamia **(B)** Oedma

(C) Spleeenomegaly **(D)** Leuceamia

45. The cardiac muscles are:

(A) Epicardium **(B)** Myocardium

(C) Endocardium **(D)** None the above

46. The fibrous chords in the heart are:

(A) Papillary muscle **(B)** Tricusopid valve

(C) Choradae tendinae **(D)** Bicuspid valve

47. Match semi lunar valve with one of the following:

(A) Right auricle **(B)** Right ventricle

(C) Pulmonary trunk **(D)** Left auricle

48. The muscles present inside the ventricle are:

(A) Cardiac muscle **(B)** Smooth muscles

(C) Papillary muscles **(D)** Skeletal muscles

49. Which of the followings is the largest artery?

(A) Coronary **(B)** Aorta

(C) Iliac **(D)** Vena cava

50. The artery which suppies blood to leg is:

(A) Coronary **(B)** Aorta

(C) Iliac **(D)** Femoral

51. Which of the followings supply blood to liver?

(A) Renal vein **(B)** Hepatic portal

(C) Hepatic vein **(D)** Hepatic artery

52. Interclated discs are present in:

(A) Vein **(B)** Artery

(C) Heart **(D)** Kidney

53. Which of the followings brings blood form liver?

(A) Renal vein **(B)** Hepatic portal

(C) Hepatic vein **(D)** Hepatic artery

54. Match cynosis with one of the followings:

(A) ECG **(B)** Artificial pace

(C) Blue baby **(D)** SA node

55. The recording of electrical potential is:

(A) ECG **(B)** Artificial pace

(C) Blue baby **(D)** SA node

56. Which of the followings is not present in the wall of artery?

(A) Artery **(B)** Vein

(C) Capillary **(D)** Heart

57. Select one of the followings for atherosclerosis:

(A) Artery **(B)** Vein

(C) Capillary **(D)** Heart

58. The exchange of material takes place through:

(A) Artery **(B)** Vein

(C) Capillary **(D)** Heart

59. Pulse is felt in:

(A) Artery **(B)** Vein

(C) Capillary **(D)** Heart

60. The condition of high blood pressure is called:

(A) Stroke **(B)** Oedma

(C) Hypertension **(D)** Myocardial infraction

61. Match heart attack with one of the followings:

(A) Stroke **(B)** Oedma

(C) Hypertension **(D)** Myocardial infraction

62. A plug of blood is called:

(A) Clot **(B)** Bolus

(C) Embolus **(D)** Hypertension

63. Bolus on new location is called:

(A) Clot **(B)** Bolus

(C) Embolus **(D)** Hypertension

64. Match stroke with one of the followings:

(A) Stroke **(B)** Cerebral infraction

(C) Hypertension **(D)** Myocardial infraction

65. Lacteal is a:

(A) Lymph capillary **(B)** Lymph vessel

(C) Lymph trunk **(D)** Lymph node

66. The discharge of blood from blood vessels is called:

(A) Stroke **(B)** Oedma

(C) Hypertension **(D)** Haemorrhage

67. Lymphocytes are present at:

(A) Lymph capillary **(B)** Lymph vessel

(C) Lymph trunk **(D)** Lymph node

68. Match plasma cells with one of the following:

(A) T lamphocyte **(B)** B lamphocyte

(C) Basophils **(D)** Neutrophils

69. Which of the followings is used in active immunity?

(A) Antibody **(B)** Vaccine

(C) Antisera **(D)** Antigen

70. Which of the followings is used in passive immunity?

(A) Antibody **(B)** Vaccine

(C) Antisera **(D)** Antigen

71. Which of the followings is not transport in organisms?

(A) The movement of material within the body

(B) The movement of material form inside to out the body

(C) The movement of material outside the body

(D) The movement of material form outside to inside

72. Which of the following processes is not involved in transport of material within the body of plants:

(A) Respiration **(B)** Transportation

(C) Photosynthesis **(D)** Reproduction

73. Which of the following nutrient a plant does not need?

(A) Carbon dioxide **(B)** Water

(C) Oxygen **(D)** Minerals

74. Symplest pathway is the pathway in which material:

(A) Move through the plasmodesmata

(B) Move through the spaced between the cells

(C) Move through the tonoplast of the vacuole

(D) All of the above

75. Apoplast pathway is the pathway in which martial:

(A) Move through the plasmodesmata

(B) Move through the spaced between the cells

(C) Move through the tonoplast of the vacuole

(D) All of the above

76. The casparian strips are special structures which are present in the endodermis. These are used to:

(A) Make the movement materials fast through the endodermis

(B) Make the movement of materials slow through the endodermis

(C) Block the movement of materials through the endodermis

(D) None of the above

77. Which of the following processes does not take place during active transport?

(A) The movement of materials form higher to lower concentration

(B) The movement of materials form lower to higher concentration

(C) The use of ATP during movement of materials

(D) All of the above

78. Which of the followings is the process of osmosis?

(A) The movement of materials from higher to lower concentration

(B) The movement of materials from higher water potential to lower potential

(C) The movement of material through semi permeable membrane

(D) All of the above

79. The cytoplasmic strands which extend through the pores in adjacent cells are:

(A) Cell wall **(B)** Plasmodesmata

(C) Endoplasmic reticulum **(D)** Cell skeleton

80. Which of the followings is water potential?

(A) The change of water potential of a system due to presence of solute molecules

(B) The pressure exerted by the protoplast against the cell wall of the plant cell

(C) The total kinetic energy of the water molecules

(D) None of the above

81. Which of the followings is osmotic potential?

(A) The change of water potential of a system due to presence of solute molecules

(B) The pressure exerted by the protoplast against the cell wall of the plant cell

(C) The total kinetic energy of the water molecules

(D) None of the above

82. Which of the followings is pressure potential?

(A) The change of water potential of a system due to presence of solute molecules

(B) The pressure exerted by the protoplast against the cell wall of the plant cell

(C) The total kinetic energy of the water molecules

(D) None of the above

83. There are two cells A and B

A cell has water potential = –200 kPa

B cell has water potential = –300 kPa, then find:

(A) Water will move form A to B

(B) Water will move form B to A

(C) Water will not move in any direction

(D) None of the above

84. The solute potential of a cell = –1000 kPa, its pressure potential = 800 kPa, then its water potential will be:

(A) 1800 kPa **(B)** –200 kPa

(C) –1800 kPa **(D)** 200 kPa

85. The solute potential of a cell = -2000, its pressure potential = 1300, then its water Solute potential will be:

(A) –3300 **(B)** –700

(C) 700 **(D)** 3300

86. The incipient plasmolysis is a point at which:

(A) Plasmolysis starts **(B)** Plasmolysis stops

(C) Plasmolysis is fast **(D)** Plasmolysis is slow

87. Maximum pressure potential is achieved when a cell is placed in:

(A) Distilled water **(B)** Water with low osmotic pressure

(C) Salty water **(D)** None of the above

88. Osmoregulation is a mechanism to:

(A) Increase the osmotic pressure

(B) Decrease the osmotic pressure

(C) Make the osmotic pressure constant

(D) All the above

89. The forces of attraction between the water molecule and tracheid water are:

(A) Adhesive forces **(B)** Cohesive forces

(C) Tensile forces **(D)** Electrostatic forces

90. The pulling of one molecule by the other molecule is:

(A) Adhesive forces **(B)** Cohesive forces

(C) Tensile forces **(D)** Electrostatic forces

91. Which of the followings is not relevant to cohesion tension theory?

(A) Transpiration **(B)** Adhesion

(C) Diffusion **(D)** Tension

92. Hydrostatic pressure in xylem is increased when:

(A) Root pressure is increased **(B)** Root pressure is decreased

(C) Root pressure is static **(D)** All of the above

93. Guttation is a process in which:

(A) Water is lost from the stomata

(B) Water is lost from the lenticels

(C) Water is lost form secreting glands

(D) Water is lost from root

94. The cause of Guttation is:

(A) Transpiration **(B)** Ascent of sap

(C) Root pressure **(D)** All of the above

95. Which of the following is relevant to lmbibition?

(A) It is a process in which a substance absorbs water

(B) It is a process in which a substance swells

(C) It is a process in which a substance does not dissolve

(D) All of the above

96. Which of the followings is not an importance of imbibition?

(A) It helps in the germination of seed

(B) It helps in the osmosis of water

(C) It helps in the ascent of sap

(D) It helps in the absorption of water by seed

97. Which of the pressures is responsible for the process of bleeding?

(A) Osmotic pressure **(B)** Solute pressure

(C) Hydrostatic pressure **(D)** Tensile pressure

98. Which of the following transpirations is most abundant in plants?

(A) Cuticular transpiration **(B)** Lenticular transpiration

(C) Stomatal transpiration **(D)** None of the above

99. The guard cells have special characteristics which help greatly in the opening and closing of stomata. This characteristic is:

(A) It has thick wall **(B)** It has large size

(C) It has chloroplast **(D)** It has large vacuole

100. Which of the followings in not true about the opening and closing` of stomata?

(A) Light helps in the opening and closing of stomata

(B) K ion are responsible for the opening and closing of stomata

(C) The osmosis of water is responsible for the opening and closing of stomata

(D) All of the above

101. The rate of transpiration is increased when:

(A) Low light **(B)** Temperature decrease

(C) Humidity increased **(D)** CO_2 is lowered

102. The hormone abscisic acid is responsible for:

(A) Opening of stomata **(B)** Closing of stomata

(C) Both A and B **(D)** It never affect it

103. Which of the following is not the importance of transpiration?

(A) Ascent of sap **(B)** Transport of minerals

(C) Exchange of gases **(D)** Cooling of plants

104. Which of the following cells is not present in phloem cells?

(A) Companion cells **(B)** Sieve tube cells

(C) Parenchyma cells **(D)** Sclerenchymatous cells

105. Which of the following cells of phloem are dead?

(A) Companion cells **(B)** Sieve tube cells

(C) Parenchyma cells **(D)** None of the above

106. Which of the following is area of supply of what?

(A) Leaf **(B)** Steam

(C) Root **(D)** Fruit

107. Which of the following is area of sink of what?

(A) Leaf **(B)** Steam

(C) Root **(D)** Fruit

108. The average of the sugar movement in the phloem is:

(A) 1 meter per hour **(B)** 2 meter per hour

(C) 3 meter per hour **(D)** 4 meter per hour

109. Which of the following is not relevant to pressure flow theory?

(A) Formation of starch from glucose

(B) Consumption of glucose by respiration

(C) Increase of hydrostatic pressure in the phloem cells

(D) Movement of water in to cells

110. A planarian does not need a separate system for transportation because:

(A) It has flat body **(B)** It is acoelomate

(C) It has intestinal coeca **(D)** All of the above

111. Which of the following animals has open circulatory system?

(A) Hydra **(B)** Man

(C) House fly **(D)** Earthworm

112. Which of the following animals has close circulatory system?

(A) Hydra **(B)** Snail

(C) House fly **(D)** Earthworm

113. The blood of the insects is called haemolymph because:

(A) It has hemoglobin **(B)** It is colorless

(C) It has lymph **(D)** It moves openly

114. Which of the followings is not part of haemocoel in cockroach?

(A) Perivisceral sinus **(B)** Perineural sinus

(C) Pericardial sinus **(D)** None of the above

115. Which of the following functions is not performed by blood vascular system of the cockroach?

(A) Transport of nutrients **(B)** Transport of gases

(C) Transport of waster material **(D)** Transport of water

116. The close circulatory system is more efficient than the open circulatory system because it shows:

(A) Rapid movement in body **(B)** Rapid exchange of material

(C) It does not come in contact **(D)** Economy of blood

117. The difference between the heart of earthworm and cockroach is that:

(A) The heart of earthworm is more efficient than the cockroach

(B) The earth worm has more hearts while cockroach has one heart

(C) The heart of earthworm is closed while of cockroach is open

(D) None of the above

118. The heart of which of the following animals functions as single circuit heart?

(A) Fish **(B)** Amphibian

(C) Reptiles **(D)** Mammals

119. The number of chambers in the heart of the fishes is:

(A) Two **(B)** Three

(C) Four **(D)** Five

120. The number of chambers in the heart of Amphibians is:

(A) Two **(B)** Three

(C) Four **(D)** Five

121. The number of chambers in the heart of the Mammals is:

(A) Two **(B)** Three

(C) Four **(D)** Five

122. The number of chambers in the heart of the birds is:

(A) Two **(B)** Three

(C) Four **(D)** Five

123. Which of the following arteries supply blood to heart muscles?

(A) Aorta **(B)** Pulmonary artery

(C) Coronary artery **(D)** Renal artery

124. Which of the following chambers of the heart of fish has oxygenated blood?

(A) Sinus venosus **(B)** Atrium

(C) Ventricle **(D)** None of the above

125. Which of the following chambers of the heart of Amphibians has oxygenated blood?

(A) Right atrium **(B)** Left atrium

(C) Ventricle **(D)** Sinus venosus

126. In which animals of the following mixing of oxygenated and deoxygenated blood does not take place in ventricle?

(A) Frog **(B)** Lizards

(C) Crocodile **(D)** None of the above

127. The ventricle of the crocodiles are completely portioned in but still there is mixing of oxygenated and deoxygenated blood in it, because:

(A) The membrane between the ventricles is very thin

(B) The ventral aorta is undivided

(C) The dorsal aorta is undivided

(D) None of the above

128. There is separation of oxygenated and deoxygenated bloods in birds and mammals because:

(A) The ventricles are completely divided

(B) The ventral aorta is divided into aortic and pulmonary trunk

(C) The aortic arch is divided into two systemic arches

(D) None of the above

129. Which of the following blood vessels has oxygenated blood:

(A) Pulmonary artery **(B)** Pulmonary vein

(C) Per-caval **(D)** Post-caval

130. The amount of plasma in blood is:

(A) 35% **(B)** 45%

(C) 55% **(D)** 65%

131. The percentage of inorganic salts and ions in the plasma is:

(A) 0.6 **(B)** 0.7

(C) 0.8 **(D)** 0.9

132. The normal pH of the human blood is:

(A) 6.4 **(B)** 7.4

(C) 8.4 **(D)** 9.4

133. The percentage of the plasma protein in the blood is:

(A) 4-5 **(B)** 5-6

(C) 7-8 **(D)** 7-9

134. Which of the following proteins is not present in the plasma of the blood?

(A) Immunoglobulin or antibodies **(B)** Prothrombin

(C) Haemoglobin **(D)** Fibrinogen

135. Steroid hormones are synthesized from:

(A) Nucleic acid **(B)** Cholesterol

(C) Amino acids **(D)** Carbohydrates

136. Which of the following substances is not present in the plasma of blood?

(A) CO_2 **(B)** Oxygen

(C) Urea **(D)** Proteins

137. Which of the following cells is most abundant in the blood?

(A) Red blood cells **(B)** White blood cells

(C) Platelets **(D)** None of the above

138. A cubic millimeter blood of male contains RBC:

(A) $5\text{-}5^{1/2}$ million **(B)** $4\text{-}4^{1/2}$ million

(C) 3-4 million **(D)** None of the above

139. Which of the following not a Granulocyte?

(A) Neutrophils **(B)** Eosinophils

(C) Monocytes **(D)** Basophils

140. Pus is formed from which of the following dead white blood cells?

(A) Lymphocytes **(B)** Eosinophils

(C) Monocytes **(D)** Basophils

141. Which of the following substances inhibit the clotting of blood?

(A) Histamine **(B)** Heparin

(C) Interferon **(D)** None of the above

142. Which of the following structures is not cells?

(A) Lymphocytes **(B)** Eosinophils

(C) Monocytes **(D)** Platelets

143. Buffer is a substance which maintains the:

(A) Concentration of proteins in blood

(B) pH of the blood

(C) Amount of gases in the blood

(D) Amount of water in the blood

144. Which of the following processes is a homeostasis?

(A) To maintain the amount of water constant in the blood

(B) To maintain the functioning of the body

(C) To maintain the process of respiration

(D) To maintain the muscular activity

145. Which of the followings is not the function of blood?

(A) It transports gases in the body **(B)** It transports reproductive cells in the body

(C) It transports food within the body **(D)** It transports waste material in body

146. Which of the followings is Leucaemia?

(A) Uncontrolled production of RBC

(B) Uncontrolled production of WBC

(C) Uncontrolled production of Platelets

(D) All of the above

147. Thalassaemia is an abnormality of:

(A) RBC **(B)** WBC

(C) Platelets **(D)** None of the above

148. Thalassaemia is indicated by:

(A) Presence of leucocytes **(B)** Presence of microcytes

(C) Presence of Lymphocytes **(D)** Presence ofMonocytes

149. Which of the following is characteristic of the oedema?

(A) Release of fluid from the body

(B) Presence of excessive fluid in the tissues

(C) Presence of excessive proteins in the body

(D) All of the above

150. Which of the followings is not the reason of the extracellular oedema?

(A) Abnormal leakage of fluid from the blood capillaries

(B) Abnormal movement of fluid from the outside of body

(C) Thy lymphatic system fails to bring back fluid form the intestinal fluid

(D) The renal(kidney) retention of slats and water

151. Which of the followings is not the effect of oedema?

(A) It disturbs the exchange and concentration of minerals in the blood and body cells

(B) It affects the blood pressure

(C) It increases the heart load

(D) It destroy the cells

152. Which of the following layers of heart has intercalated discs?

(A) Epicardium **(B)** Myocardium

(C) Endocardium **(D)** None of the above

153. The valve present between right atrium and right ventricle is called:

(A) Tricuspid valve **(B)** Bicuspid valve

(C) Semilunar valve **(D)** None of the above

154. The valve present between left atrium and left ventricle is called:

(A) Tricuspid valve **(B)** Bicuspid valve

(C) Semilunar valve **(D)** None of the above

155. The valve present at the base of aorta is called:

(A) Tricuspid valve **(B)** Bicuspid valve

(C) Semilunar valve **(D)** None of the above

156. Which of the following arteries supply blood to legs?

(A) Femoral artery **(B)** Renal artery

(C) Coronary artery **(D)** Pulmonary artery

157. Which of the following veins collects blood from the digestive system and supply blood to liver?

(A) Hepatic vein **(B)** Hepatic portal vein

(C) Renal veins **(D)** None of the above

158. The voice of lubb is produced during the contraction of heats when:

(A) Tricuspid valve is closed

(B) Bicuspid valve is closed

(C) Both tricuspid and bicuspid are closed

(D) Semilunar valves is closed

159. The voice of dub is produced during the contraction of heart when:

(A) Tricuspid valve is closed

(B) Bicuspid valve is closed

(C) Both tricuspid and bicuspid are closed

(D) Semilunar valves is close

160. The heart of man contracts during his life for:

(A) 1.5 million **(B)** 2.5 million

(C) 3.5 million **(D)** 4.5 million

161. The impulse of heart starts from:

(A) Sino-atrial node **(B)** Atriventricular node

(C) Bundle muscles **(D)** None of the above

162. Cyanosis is a condition in which:

(A) Oxygen supply to skin is stopped **(B)** The skin becomes blue

(C) Blood supply to skin is stopped **(D)** None of the above

163. Which of the following layers is present in the arteries?

(A) Connective tissues **(B)** Smooth and circular muscles

(C) Connective tissues **(D)** All of the above

164. Which of the followings is Atherosclerosis?

(A) The breaking of the wall of the artery

(B) The narrowness of the wall of the artery

(C) The deposition of fats in the wall of the artery

(D) None of the above

165. Which of the followings is the characteristic of capillaries?

(A) It has three layers of endothelium

(B) It has one layer of endothelium

(C) It has one layer of connective tissues

(D) It has one layer of elastic tissues

166. Which of the followings is the main function of capillaries?

(A) Supply blood to tissues **(B)** Exchange of materials

(C) Bring blood from tissues **(D)** Transport of materials

167. Interstitial is present:

(A) With in the blood **(B)** With in capillaries

(C) Among the cells **(D)** With in the cell

168. Which of the following layers is thin in veins?

(A) Connective tissues and elastic fibers

(B) Smooth and circular muscles

(C) Connective tissues

(D) All of the above

169. The movement of blood in veins takes place by the:

(A) Contraction and relaxation of the wall of the vein

(B) Contraction and relaxation of the skeletal muscles

(C) Pressure of the blood in the vein

(D) None of the above

170. Which of the following veins has oxygenated blood?

(A) Renal vein **(B)** Hepatic vein

(C) Pulmonary vein **(D)** Coronary vein

171. Which of the following materials is not present in the interstitial fluid?

(A) Water **(B)** Salts

(C) Fats **(D)** Blood cells

172. In which of the following blood vessels valves are present?

(A) Artery **(B)** Vein

(C) Capillary **(D)** None the above

173. Which of the following blood vessels has high blood pressure?

(A) Artery **(B)** Vein

(C) Capillary **(D)** None the above

174. In which of the following blood vessels, pulse is felt?

(A) Artery **(B)** Vein

(C) Capillary **(D)** None the above

175. Which of the following blood vessels is responsible for exchange of material?

(A) Artery **(B)** Vein

(C) Capillary **(D)** None of the above

176. The systolic pressure of the heart is:

(A) 80 mm Hg **(B)** 100 mm Hg

(C) 110 mmHg **(D)** 120 mmHg

177. The diastolic pressure of the heart is:

(A) 80 mm Hg **(B)** 100 mm Hg

(C) 110 mmHg **(D)** 120 mmHg

178. In which blood vessels of the following the systolic and diastolic pressure is same?

(A) Artery **(B)** Aorta

(C) Arterioles **(D)** Capillary

179. Which of the following blood vessels has greater cross sectional area?

(A) Artery **(B)** Vein

(C) Capillary **(D)** Aorta

180. Which of the followings is hypertension?

(A) Low blood pressure **(B)** High blood pressure

(C) Cholesterol **(D)** All of the above

181. Which of the followings is thrombus?

(A) A blockage of blood vessel **(B)** A clot in the vessel

(C) A moving clot in vessel **(D)** None of the above

182. Which of the followings is embolus?

(A) A blockage of blood vessel **(B)** A clot in the vessel

(C) A moving clot in vessel **(D)** None of the above

183. Which of the following conditions is helpful in the prevention of heart attack?

(A) Avoid too much fatty food rich in cholesterol

(B) Maintain normal body weight

(C) Control the blood pressure by regular walk and exercises

(D) All of the above

184. Stroke is a condition in which:

(A) Heart does not receive proper blood

(B) Liver does not received proper blood

(C) Brain does not receive proper blood

(D) None of the above

185. Which of the followings is the characteristic of the lymphatic system?

(A) The system which transports material between two blood vessels

(B) The system which transports material between the tissues

(C) The system which transports material between the tissues and blood

(D) None of the above

186. Which of the followings is common between lymph vessels and veins?

(A) Both have small bore **(B)** Both have valves

(C) Both have low blood pressure **(D)** Both are communicated

187. The lymph vessels transfer the lymph into the blood through:

(A) Subclavian artery **(B)** Subclavian vein

(C) Iliac artery **(D)** Iliac vein

188. Which of the following organs filter the lymph?

(A) Heart **(B)** Liver

(C) Spleen **(D)** Pancreas

189. Which of the followings is involved in humoral immune response?

(A) T-lymphocytes **(B)** Helper T-lymphocytes

(C) B-lymphocytes **(D)** None of the above

190. Which of the followings is involved in cell mediated response?

(A) T-lymphocytes **(B)** Helper T-lymphocytes

(C) B-lymphocytes **(D)** None of the above

191. The T lymphocytes become mature in:

(A) Thymus gland **(B)** Bursa of fabricius

(C) Bone marrow **(D)** Lymph node

192. The B-lymphocytes become mature in:

(A) Thymus gland **(B)** Bursa of fabricius

(C) Bone marrow **(D)** Lymph node

193. Which of the followings is active immunity?

(A) Injection of antibiotics **(B)** Injection of antigen

(C) Injection of antibody **(D)** None of the above

194. Which of the followings is passive immunity?

(A) Injection of antibiotics **(B)** Injection of antigen

(C) Injection of antibody **(D)** None of the above

195. If a snake bites a person, which of the following things is injected into the affected person?

(A) Antibody **(B)** Antigen

(C) Antisera **(D)** None the above

196. The main processes involved for getting the material into and out of cells are:

(A) Endocytosis and exocytosis **(B)** Active and passive transport

(C) Diffusion and osmosis. **(D)** All above

197. Most of the uptake of water and minerals from soil takes place through:

(A) Roots **(B)** Epidermal layers

(C) Root cap **(D)** Root hair

198. The membrane of vacuole is named as:

(A) Tonoplast **(B)** Apoplast

(C) Symplast **(D)** None of the above

199. Mycorrhizal fungi are present in how many families of flowering plants?

(A) 10% **(B)** 80%

(C) 100% **(D)** 90%

200. The loss of liquid water through hydathodes in plants is called:

(A) Imbibition **(B)** Transpiration

(C) Guttation **(D)** Bleeding

201. In which leaves the stomata are confined to only the lower epidermis?

(A) Isobilateral **(B)** Dorsiventral

(C) Both A and B **(D)** None

202. The closing and opening of stomata is directly controlled by:

(A) Temperature **(B)** Wind

(C) Light **(D)** Water

203. The pressure flow theory is the most acceptable theory for the transport in the phloem of:

(A) Gymnosperm **(B)** Bryophytes

(C) Angiosperms **(D)** Pteridophyte

204. In Hydra ectodermal cells get food from endodermal cells by:

(A) Exocytosis **(B)** Diffusion

(C) Endocytosis **(D)** Both A and B

205. The sites where exchange of materials between blood and body tissues takes place are:

(A) Arteries **(B)** Capillaries

(C) Lymph vessels **(D)** Veins

206. The heart of which of these functions as a single circuit heart?

(A) Fishes **(B)** Reptiles

(C) Mammals **(D)** Birds

207. The normal pH of human blood is:

(A) 4 **(B)** 7.4

(C) 7 **(D)** 4.7

208. The average life span of RBC is about:

(A) 06 months **(B)** 04 months

(C) One year **(D)** 08 months

209. A white substance called pus is produced at infection sites due to killing of:

(A) Monocytes **(B)** Erythrocytes

(C) Leucocytes **(D)** Platelets

210. The protective membrane of human heart is called:

(A) Endocardium **(B)** Epicardium

(C) Myocardium **(D)** Pericardium

211. Antiserum is a serum containing:

(A) Haemoglobin **(B)** Antibodies

(C) Lymph **(D)** Antigens

212. In humans the heart beat lasts for:

(A) 18 seconds **(B)** 0.8 seconds

(C) 1.8 seconds **(D)** 8 seconds

213. In the liver, every cell is in direct contact with:

(A) None **(B)** Capillary

(C) Artery **(D)** Vein

214. Heart beat involves how many distinct stages.

(A) One **(B)** Four

(C) Three **(D)** Two

215. The renal vein brings the impure blood from:

(A) Liver **(B)** Kidney

(C) Lungs **(D)** Brain

216. The roots of a plant not only ———— the plant in soil, but also absorb minerals and water from the soil.

(A) Acoelomate **(B)** Active

(C) ATP **(D)** Anchor

217. The root hair are extensions of ———— cells of roots.

(A) Acoelomate **(B)** Exosmosis

(C) Epidermal **(D)** Isobilateral

218. The passive uptake of minerals in plants involves which process?

(A) Exosmosis **(B)** Imbibition

(C) Isobilateral **(D)** Diffusion

219. The passive and active uptake of minerals by root cells involve the use of energy in the form of:

(A) ATP **(B)** Active

(C) Anchor **(D)** Solute

220. Most of ions are taken up by the roots by the process of:

(A) Active transport **(B)** Epidermal

(C) Anchor **(D)** ATP

221. Active transport is selective and is dependent on:

(A) Exosmosis **(B)** Isobilateral

(C) Respiration **(D)** Cuticular

222. The movement of water out of the cell by osmosis is called:

(A) Endosmosis **(B)** Leucaemia

(C) Exosmosis **(D)** Isobilateral

223. Pure ———— has maximum water potential.

(A) Leucaemia **(B)** Water

(C) Wind **(D)** Acoelomate

224. The total water potential is sum of pressure potential and:

(A) Xylem **(B)** Solute potential

(C) Dixon **(D)** One

225. Cohesion tension theory was proposed by:

(A) Palms **(B)** Diffusion

(C) One **(D)** Dixon

226. The lignin and cellulose provide strength to cell wall of:

(A) Splenn **(B)** Dixon

(C) Xylem vessels **(D)** Diffusion

227. About what % of total water pulled up in the leaves is used by the plants in various activities including photosynthesis?

(A) One **(B)** Three

(C) Two **(D)** Four

228. The volume of dry seed may increase up to 200 times by:

(A) Imbibition **(B)** Palms

(C) Osmosis **(D)** Splenn

229. The sap in some ———— contains sugar and water in addition to organic and inorganic substances.

(A) Dixon **(B)** Acoelomate

(C) Splenn **(D)** Palms

230. At night when the stomata are almost closed, through what transpiration takes place in plants?

(A) Cuticular **(B)** Respiration

(C) Water **(D)** Solute

231. In which leaves the stomata are present both in upper and lower epidermis?

(A) Isobilateral **(B)** Imbibition

(C) Epidermal **(D)** Solute

232. The air in motion is called:

(A) Water **(B)** Solute

(C) Wind **(D)** Wilting

233. Excess loss of water from the plant can lead to:

(A) Wind **(B)** Wilting

(C) Water **(D)** Solute

234. Organic solutes are transported by:

(A) Isobilateral **(B)** Imbibition

(C) Phloem tissue **(D)** Water

235. There is no body cavity in planaria hence, called as:

(A) Pseudocoelomate **(B)** Cuticular

(C) Acoelomate **(D)** Isobilateral

236. Most of the plasma proteins are synthesized in the:

(A) Liver **(B)** Diffusion

(C) Leucaemia **(D)** Systole

237. In the embryonic life RBC are formed in liver and:

(A) Imbibition **(B)** Leucaemia

(C) Spleen **(D)** Diffusion

238. What is caused as a result of uncontrolled production of white blood cells?

(A) Blood clotting **(B)** Leucaemia

(C) Imbibition **(D)** Isobilateral

239. One complete heartbeat consists of one diastole and one:

(A) Cuticular **(B)** Systole

(C) Nervous **(D)** Splenn

240. The diameter of capillary can be changed by:

(A) Splenn **(B)** Leucaemia

(C) Nervous stimulation **(D)** Phloem

241. Prothrombin:

(A) Body defence **(B)** Blood clotting

(C) Catalyst **(D)** Pace maker

242. Fibrinogin:

(A) Blood clotting **(B)** Catalyst

(C) Blueness of skin **(D)** Body defence

243. Immunoglobulin:

(A) Body defence **(B)** Blood clotting

(C) Blueness of skin **(D)** Catalyst

244. Cholesterol:

(A) Blood clotting **(B)** Steroid hormones

(C) Body defence **(D)** Blueness of skin

245. Cyanosis:

(A) Blood clotting **(B)** Blueness of skin

(C) Pace maker **(D)** Body defence

246. Leucaemia:

(A) High blood pressure **(B)** Cooley's anaemia

(C) Heart attack **(D)** Blood cancer

247. Thalassaemia:

(A) Excess of fluid in the body tissue

(B) Cooley's anaemia

(C) Low blood pressure

(D) Blood cancer

248. Myocardial Infarction:

(A) Low blood pressure **(B)** Heart attack

(C) Cooley's anaemia **(D)** High blood pressure

249. Hypertension:

(A) High blood pressure **(B)** Blood cancer

(C) Cooley's anaemia **(D)** Low blood pressure

250. Oedema:

(A) Blood cancer **(B)** Low blood pressure

(C) Cooley's anaemia **(D)** Excess of fluid in the body tissue

251. Cohesion tension theory:

(A) Thomas B. Cooley **(B)** Sacks

(C) H. Van Mohl **(D)** Dixon

252. Imbibition process:

(A) Dixon **(B)** H. Van Mohl

(C) Sacks **(D)** Thomas B. Cooley

253. Starch sugar Hypothesis:

(A) H. Van Mohl **(B)** Ernst munch

(C) Dixon **(D)** Sacks

254. Pressure flow theory:

(A) Ernst munch **(B)** Sacks

(C) H. Van Mohl **(D)** Mandel

255. Spleenomegaly:

(A) Thomas B. Cooley **(B)** Dixon

(C) Ernst munch **(D)** H. Van Mohl

256. Myelogenous cells:

(A) Inactivate inflammation **(B)** Antibodies production

(C) Blood formation **(D)** Bone marrow

257. Microcytes:

(A) Bone marrow **(B)** Enlargement of spleen

(C) Transports oxygen **(D)** Blood formation

258. Lymphocytes:

(A) Enlargement of spleen **(B)** Antibodies production

(C) Blood formation **(D)** Bone marrow

259. Eosinophil:

(A) Inactivate inflammation **(B)** Transports oxygen

(C) Bone marrow **(D)** Enlargement of spleen

260. Erythrocyte:

(A) Bone marrow **(B)** Transports oxygen

(C) Blood formation **(D)** Inactivate inflammation

Answers

Sr.	Ans.	Sr.	Ans.	Sr.	Ans.	Sr.	Ans.	Sr.	Ans.
1.	(D)	**2.**	(A)	**3.**	(B)	**4.**	(B)	**5.**	(B)
6.	(B)	**7.**	(A)	**8.**	(B)	**9.**	(A)	**10.**	(B)
11.	(C)	**12.**	(A)	**13.**	(D)	**14.**	(D)	**15.**	(C)
16.	(A)	**17.**	(C)	**18.**	(B)	**19.**	(A)	**20.**	(C)
21.	(A)	**22.**	(C)	**23.**	(D)	**24.**	(D)	**25.**	(B)
26.	(C)	**27.**	(A)	**28.**	(B)	**29.**	(A)	**30.**	(C)
31.	(C)	**32.**	(C)	**33.**	(C)	**34.**	(B)	**35.**	(D)
36.	(D)	**37.**	(A)	**38.**	(B)	**39.**	(A)	**40.**	(B)
41.	(B)	**42.**	(A)	**43.**	(A)	**44.**	(A)	**45.**	(B)
46.	(B)	**47.**	(C)	**48.**	(C)	**49.**	(C)	**50.**	(B)
51.	(D)	**52.**	(D)	**53.**	(C)	**54.**	(D)	**55.**	(C)
56.	(A)	**57.**	(D)	**58.**	(A)	**59.**	(C)	**60.**	(A)
61.	(C)	**62.**	(D)	**63.**	(B)	**64.**	(C)	**65.**	(B)
66.	(A)	**67.**	(D)	**68.**	(D)	**69.**	(B)	**70.**	(B)
71.	(C)	**72.**	(D)	**73.**	(C)	**74.**	(A)	**75.**	(B)
76.	(C)	**77.**	(A)	**78.**	(D)	**79.**	(B)	**80.**	(C)
81.	(A)	**82.**	(A)	**83.**	(A)	**84.**	(B)	**85.**	(A)
86.	(A)	**87.**	(A)	**88.**	(C)	**89.**	(B)	**90.**	(B)
91.	(D)	**92.**	(A)	**93.**	(C)	**94.**	(C)	**95.**	(D)
96.	(B)	**97.**	(C)	**98.**	(C)	**99.**	(B)	**100.**	(D)
101.	(D)	**102.**	(B)	**103.**	(B)	**104.**	(D)	**105.**	(B)
106.	(A)	**107.**	(D)	**108.**	(A)	**109.**	(B)	**110.**	(D)
111.	(C)	**112.**	(D)	**113.**	(B)	**114.**	(D)	**115.**	(B)
116.	(D)	**117.**	(B)	**118.**	(A)	**119.**	(A)	**120.**	(A)
121.	(C)	**122.**	(C)	**123.**	(C)	**124.**	(D)	**125.**	(B)
126.	(D)	**127.**	(B)	**128.**	(B)	**129.**	(B)	**130.**	(C)

Sr.	Ans.	Sr.	Ans.	Sr.	Ans.	Sr.	Ans.	Sr.	Ans.
131.	(D)	**132.**	(B)	**133.**	(D)	**134.**	(C)	**135.**	(D)
136.	(B)	**137.**	(A)	**138.**	(A)	**139.**	(C)	**140.**	(C)
141.	(B)	**142.**	(D)	**143.**	(B)	**144.**	(A)	**145.**	(B)
146.	(B)	**147.**	(A)	**148.**	(B)	**149.**	(B)	**150.**	(B)
151.	(D)	**152.**	(B)	**153.**	(A)	**154.**	(B)	**155.**	(C)
156.	(A)	**157.**	(B)	**158.**	(C)	**159.**	(D)	**160.**	(B)
161.	(A)	**162.**	(B)	**163.**	(D)	**164.**	(B)	**165.**	(B)
166.	(B)	**167.**	(C)	**168.**	(B)	**169.**	(B)	**170.**	(C)
171.	(D)	**172.**	(B)	**173.**	(A)	**174.**	(A)	**175.**	(C)
176.	(D)	**177.**	(A)	**178.**	(D)	**179.**	(C)	**180.**	(B)
181.	(B)	**182.**	(C)	**183.**	(D)	**184.**	(C)	**185.**	(C)
186.	(B)	**187.**	(B)	**188.**	(C)	**189.**	(B)	**190.**	(A)
191.	(A)	**192.**	(D)	**193.**	(B)	**194.**	(C)	**195.**	(C)
196.	(C)	**197.**	(D)	**198.**	(A)	**199.**	(D)	**200.**	(C)
201.	(B)	**202.**	(C)	**203.**	(C)	**204.**	(B)	**205.**	(B)
206.	(A)	**207.**	(B)	**208.**	(B)	**209.**	(C)	**210.**	(D)
211.	(D)	**212.**	(B)	**213.**	(C)	**214.**	(B)	**215.**	(D)
216.	(D)	**217.**	(C)	**218.**	(D)	**219.**	(A)	**220.**	(A)
221.	(C)	**222.**	(C)	**223.**	(B)	**224.**	(B)	**225.**	(D)
226.	(C)	**227.**	(A)	**228.**	(A)	**229.**	(D)	**230.**	(A)
231.	(A)	**232.**	(C)	**233.**	(B)	**234.**	(C)	**235.**	(C)
236.	(A)	**237.**	(C)	**238.**	(B)	**239.**	(B)	**240.**	(C)
241.	(C)	**242.**	(A)	**243.**	(A)	**244.**	(B)	**245.**	(B)
246.	(D)	**247.**	(B)	**248.**	(A)	**249.**	(D)	**250.**	(D)
251.	(C)	**252.**	(A)	**253.**	(A)	**254.**	(A)	**255.**	(A)
256.	(D)	**257.**	(B)	**258.**	(B)	**259.**	(A)	**260.**	(B)