BIOLOGY

BOOKS - MODERN PUBLISHERS

BIOLOGY (HINGLISH)

BODY FLUIDS AND CIRCULATION

Practice Problems

1. Name the first animal group to have blood-vascular system

Watch Video Solution

2. Name the components of blood-vascular system.

Watch Video Solution

3. What is serum?

Watch Video Solution

4. What are globulins?

Watch Video Solution

5. What is nature of heart of cockroach?

Watch Video Solution

6. Define haemocoel.

Watch Video Solution

7. List two peculiar features of open circulatory system.

Watch Video Solution

8. Give the significance of closed circulatory system.

Watch Video Solution

9. What is erythropoiesis?

Watch Video Solution

10. Which leucocytes provide immunity?

Watch Video Solution

11. Name three plasma proteins

Watch Video Solution

12. What is called serum?

Watch Video Solution

13. What is haemopoiesis?

Watch Video Solution

14. Write one role of albumin

Watch Video Solution

15. What are globulins?

Watch Video Solution

16. Name the components of blood vascular system

Watch Video Solution

17. Give the function of chordae tendinae.

Watch Video Solution

18. Name two arches of human heart.

Watch Video Solution

19. Name the largest artery of human body.

Watch Video Solution

20. Name the largest vein of human body.

Watch Video Solution

21. Give the term for the period between the end of one heart beat to the end of next heart beat.

Watch Video Solution

22. What is the time taken in one heart beat?

Watch Video Solution

23. Name three phases of a heart beat.

Watch Video Solution

24. Name two heart sounds.

Watch Video Solution

25. Which instrument is employed to hear the heart sounds?

Watch Video Solution

26. Define murmur.

Watch Video Solution

27. Which type of blood circulation is found in the mammalian heart?

Watch Video Solution

28. What is systolic pressure and diastolic pressure in a normal adult man?

Watch Video Solution

29. Hypertension is

Watch Video Solution

30. Give the full form of ECG.

Watch Video Solution

31. What is electrocardiography?

Watch Video Solution

32. Define pulse .

Watch Video Solution

33. On which blood vessel, a pulse can be felt?

Watch Video Solution

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

Watch Video Solution

35. Which type of heart is found in the human beings?

Watch Video Solution

36. Name two main lymphatic vessels.

Watch Video Solution

37. What is lacteal?

Watch Video Solution

38. Give the functions of lymph nodes.

Watch Video Solution

Ncert File Ncert Exercise Question

1. Name the components of the formed elements in the blood and mention one major function of each of them.

Watch Video Solution

2. What is the importance of plasma proteins ?

Watch Video Solution

3. Match Column I with Column II:

Column I	Column II
(a) Eosinophils	(i) Coagulation
(b) RBC	(ii) Universal recipient
(c) AB blood group	(iii) Resist infection
(d) Platelets	(iv) Contraction of heart
(e) Systole	(v) Gas transport

Watch Video Solution

4. Why do we consider blood as a connective tissue ?

Watch Video Solution

5. What is the difference between lymph and blood?

Watch Video Solution

6. What is meant by double circulation? What is its significance?

Watch Video Solution

7. Write the differences between :

(a) Blood and haemolymph (b) Open and

closed system of circulation.

Watch Video Solution

8. Describe the evolutionary change in the pattern of heart among the vertebrates.

Watch Video Solution

9. Why do we call our heart myogenic?

Watch Video Solution

10. Sino-atrial node is called the pacemaker of our heart. Why?

Watch Video Solution

11. What is the significance of atrio-ventricular node and atrio-ventricular bundle in the functioning of heart?

Watch Video Solution

12. Define a cardiac cycle and cardiac output.

Watch Video Solution

13. Explain heart sounds.

Watch Video Solution

14. Draw a standard ECG and explain the different segments in it.

Watch Video Solution

Ncert File Ncert Exemplar Question Multiple Choice Questions

1. Which of the following cells does not exhibit phagocytic activity ?

A. Monocytes

B. Neutrophils

C. Basophils

D. Macrophage

Answer: C

Watch Video Solution

2. One of the common symptoms observed in people infected with Dengue fever is

A. Significant decrease in RBC count

B. Significant decrease in WBC count

C. Significant decrease in platelets count

D. Significant increase in platelets count

Answer: C

Watch Video Solution

3. Which among the following is correct during each cardiac cycle

A. The volume of blood pumped out by the Rt and Lt ventricles is same

B. The volume of blood pumped out by the Rt and Lt ventricles is different

C. The volume of blood received by each atrium is different

D. The volume of blood received by the aorta and pulmonary artery is different

Answer: A

Watch Video Solution

4. Cardiac activity could be moderated by the autonomous neural system. Tick the correct answer

A. The parasympathetic system stimulates heart rate and stroke volume

B. The sympathetic system stimulates heart rate and stroke volume

C. The parasympathetic system decreases the heart rate but increase stroke volume

D. The sympathetic system decreases the heart rate but increase stroke volume

Answer: B

Watch Video Solution

5. Mark the pair of substances among the following which is essential for coagulation of blood.

A. Heparin and calcium ions

B. Calcium ions and platelets factors

C. Oxalates and citrates

D. Platelets factors and heparin

Answer: B

Watch Video Solution

6. ECG depicts the depolarisation and repolarisation process during the cardiac cycle. In the ECG of a normal healthy individual one of the following waves is not represented.

A. Depolarisation of atria

B. Repolarisation of atria

C. Depolarisation of ventricles

D. Repolarisation of ventricles

Answer: B

Watch Video Solution

7. Which one of the following types of cells lack nucleus in humans ?

A. RBC

B. Neutrophils

C. Eosinophils

D. Monocytes

Answer: A

Watch Video Solution

8. Which one of the following blood cells is involved in antibody production ?

A. B-Lymphocytes

B. T-Lymphocytes

C. RBC

D. Neutrophils

Answer: A

 Watch Video Solution

9. The cardiac impulse is initiated and conducted further upto ventricle. The correct sequence of conduction of impulse is

A. SA Node, AV Node, Purkinje Fiber, AV Bundle

B. SA Node, Purkinje fiber, AV Node, AV Bundle

C. SA node, AV node , AV Bundle , Purkinje Fiber

D. SA Node, Purkinje fibre, AV Bundle , AV Node

Answer: C

Watch Video Solution

10. The cells involved in inflammatory reactions are

A. Basophils

B. Neutrophils

C. Eosinophils

D. Lymphocytes

Answer: A

Watch Video Solution

11. The second heart sound (dubb) is associated with the closure of

A. Tricuspid valve

B. Semilunar valves

C. Biscuspid valve

D. Tricuspid and bicuspid valves

Answer: C

Watch Video Solution

12. Which of the following correctly explains a phase/event in cardiac cycle in a standard electrocardiogram ?

A. QRS complex indicates atrial contraction.

B. QRS complex indicates ventricular contraction.

C. Time between S and T represents atrial systole

D. P-wave indicates beginning of ventricular contraction.

Answer: B

Watch Video Solution

13. Which of the following statements is incorrect ?

A. A person of 'O' blood group has anti 'A' and anti 'B' antibodies in his blood plasma

B. A person of 'B' blood group can't donate blood to a person of 'A' blood group.

C. Blood group is designated on the basis of the presence of antibodies in the blood plama

D. A person of AB blood group is universal recipient

Answer: C

Watch Video Solution

14. What would be the cardiac output of a person having 72 heart beats per minute and a stroke volume of 50 mL ?

A. 360 mL

B. 3600mL

C. 7200 mL

D. 5000 mL

Answer: B

Watch Video Solution

15. Match the terms given under Column 'A' with their functions given under Column 'B' and select the answer from the options given

below :

Column A	Column B
A. Lymphatic System	i. Carries oxygenated blood
B. Pulmonary vein	ii. Immune Response
C. Thrombocytes	iii. To drain back the tissue fluid to the circulatory system
D. Lymphocytes	iv. Coagulation of blood

A. A-ii, B-I, C-iii, D-iv

B. A-iii, B-I, C-iv , D-ii

C. A-iii, B-I ,C-iii, D-iv

D. A-ii, B-I , C-iii, D-iv

Answer: B

Watch Video Solution

16. Statement 1: Atria receive blood from all parts of the body which subsequently flows to ventricles.

Statement 2: Action potential generated at sino-atrial node passes from atria to ventricles.

A. Action mentioned in Statement 1 is dependent on action mentioned in Statement 2

B. Action mentioned in Statement 2 is depended on action mentioned in Statement 1

C. Action mentioned in Statement 1 and 2 are independent of each other .

D. Action mentioned in Statement 1 and 2 are synchronous.

Answer: B

Watch Video Solution

Ncert File Ncert Exemplar Question Very Short Answer Type Questions

1. Name the blood component which is viscous and straw coloured fluid.

Watch Video Solution

2. Plasma without ..... is called serum .

Watch Video Solution

3. ..... and monocytes are phagocytic cells.

Watch Video Solution

4. Eosinophils are associated with ..... Reaction.

Watch Video Solution

5. ..... ions play a significant role in blood clotting .

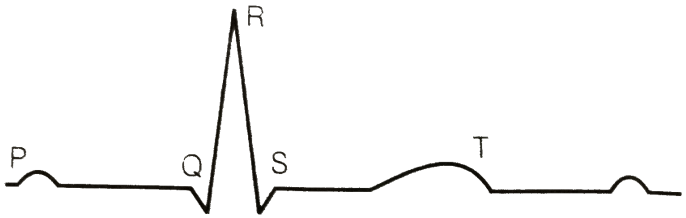
Watch Video Solution

6. One can determine the heart beat rate by counting the number of ..... in an ECG.

Watch Video Solution

7. Given below is the diagrammatic representation of a standard ECG.Lable its

different peaks.



Watch Video Solution

8. Name the vascular connection that exists between the digestive tract and liver.

Watch Video Solution

9. Given below are the abnormal conditions related to blood circulation. Name the disorders

Acute chest pain due to failure of O_2 supply to heart muscles

Increased systolic pressure

Watch Video Solution

10. Which coronary artery diseases is caused due to narrowing of the lumen of arteries?

Watch Video Solution

11. Define the following terms and give their location?

(a) Purkinje fibre

(b) Bundle of His

Watch Video Solution

12. State the function of the following in blood :

(a) Fibrinogen

(b) Globullin

(c) Neutrophils

(d) Lymphocytes

Watch Video Solution

13. What physiological circumstances lead to erythroblastosis foetalis ?

Watch Video Solution

14. Explains the consequence of a situation in which bloods does not cagulate?

Watch Video Solution

15. What is the significance of time gap in the passage of action potenial from sino-arti node to the ventricle ?

Watch Video Solution

16. How will you interpet an electrocardium (ECG) in which of the time taken in QRS complex is higher ?

Watch Video Solution

Ncert File Ncert Exemplar Question Short Answer Type Questions

1. The walls of ventricles are much thicker than atria. Explain.

Watch Video Solution

2. Differentiate between blood and lymph.

Watch Video Solution

3. Briefly describe the followings

(a) anaemia

(b) angina pectoris

(c) atherosclerosis

(d) hypertenswn

(e) heart failure

(f) erythroblastosis foetalis

Watch Video Solution

4. Explain the advantage of the complete partition of ventricle among birds and mammals and hence leading to double circulation

Watch Video Solution

5. What is the significance of hepatic portal system in the circulatory system?

Watch Video Solution

6. Explain the fuctional significance of lymphatic system ?

Watch Video Solution

7. Explain the features that distinguish between the two

Plasma and serum

Watch Video Solution

8. Thrombocytes are essential for coagulation of blood.comment.

Watch Video Solution

9. Answere the following

name the major site where RBCs are formed

which part of heart is responsible fpr initating and maintaining its rhythmic activity ?

Watch Video Solution

Ncert File Ncert Exemplar Question Long Answer Type Questions

1. Explain Rh-incompatibility in humans.

Watch Video Solution

2. Describe the events in cardiac cycle. Explain 'double circulation'.

Watch Video Solution

3. Explain different types of blood groups and donor compatibility by making a table

Watch Video Solution

4. Write short note on the following.

(a) Hypertension

(b) Coronary Artery Disease

Watch Video Solution

5. In the diagrammatic presentation of heart given below,mark and label SAN,AVN,AV bundles,bundle of his and purkinje fibers.

Watch Video Solution

Higher Order Thinking Skills Brain Twisting Very Short Answer Questions

1. Why is the human heart called myogenic in nature?

Watch Video Solution

2. What is haemocoel?

Watch Video Solution

3. Left ventricle of human heart has thickest wall. Why?

Watch Video Solution

4. Which structure inside the heart is called "Heart of heart"?

Watch Video Solution

5. State one difference between tachycardia and bradycardia.

Watch Video Solution

6. Which two factors determine the cardiac output?

Watch Video Solution

7. "Lub' sound of heart beat is louder than 'Dubb'heart sound. Why?

Watch Video Solution

8. State the function of lymph nodes.

Watch Video Solution

9. Person with "O" blood group is called universal donor. Why?

Watch Video Solution

10. State one difference between coronary artery disease (CAD) and heart failure.

Watch Video Solution

Higher Order Thinking Skills Brain Twisting Short Answer Questions

1. Why is artery more elastic and more contractile than a vein?

Watch Video Solution

2. Human circulatory system is more advantageous than that of cockroach. Why?

Watch Video Solution

3. Receiver of stethoscope is always placed on left side of chest. Why?

Watch Video Solution

4. Why is human heart called autorhythmic heart?

Watch Video Solution

5. Describe the condition termed as atherosclerosis. How does it affect the body ?

Watch Video Solution

6. What is meant by double circulation? What is its significance?

Watch Video Solution

7. Differentiate five types of leucocytes of human blood.

Watch Video Solution

8. What is blood clotting? State its significance. Why does the blood not clot inside the blood vessels of a normal person?

Watch Video Solution

9. Draw a diagram of internal structure of human heart and label the following:

(i) Mitral valve (ti) Eustachius valve (iii) Chordae tendinae (iv) Pulmonary arch.

Watch Video Solution

10. What is ECG? What do various waves of ECG indicate? Give its significance.

Watch Video Solution

Higher Order Thinking Skills Brain Twisting Long Answer Questions

1. Write short notes on:

(i) Cardiac output (ii) Hypertension

Watch Video Solution

2. Describe various blood corpuscles of human blood.

 Watch Video Solution

Quick Memory Say True Or False

1. Left ventricle is the thickest chamber of the heart.

 Watch Video Solution

2. Mitral valve is present between right auricle and right ventricle.

Watch Video Solution

3. The A. V node normally initiates the cardiac impulses.

Watch Video Solution

4. Heart sounds are heard by sphygmomanometer.

Watch Video Solution

5. Single circulation is found in fish and amphibians.

Watch Video Solution

6. Purkinje fibres are nerve fibres supplying the ventricular muscles.

Watch Video Solution

7. First heart sound results from a closure of semilunar valves.

Watch Video Solution

8. The vagus nerve reduces the heart rate.

Watch Video Solution

9. Semilunar valves open during the ventricular diastole.

Watch Video Solution

10. Erythrocytes can come out of blood capillaries by diapedesis.

Watch Video Solution

11. Vitamin K is required for conversion of prothrombin to thrombin

12. The breakdown of haemoglobin into haeme and globin takes place in liver and kidneys.

13. For safe blood transfusion, donor's antigen must be compatible with recipient's antibody.

Watch Video Solution

14. Second heart sound-called dupp, is heard at the end of ventricular systole.

Watch Video Solution

15. In ECG of a normal person, T-wave represents ventricular relaxation and ventricular repolarisation

Watch Video Solution

Quick Memory Complete The Missing Links

1. Body cavity with blood found in arthropods and molluscs is.....

Watch Video Solution

2. The S.A. node is also called ..... of the heart.

Watch Video Solution

3. Disturbances in the heart sounds are called .....

Watch Video Solution

4. ..... are ridges present inside the auricles .

Watch Video Solution

5. The mitral valve has..... cusps while the aortic valve possesses .....cusps.

Watch Video Solution

6. The..... Valves close shortly after the start of ventricular systole while the..... valves close shortly after the diastole starts

Watch Video Solution

7. Left auricle receives ..... blood while right auricle receives..... blood.

Watch Video Solution

8. First heart sound is..... while second heart sound is..... .

Watch Video Solution

9. A persistent rise in blood pressure is called ..... while decrease in blood pressure is called ..... .

Watch Video Solution

10. The cardiac impulses originate from the ..... and are passed on to the bundle of His by .....

Watch Video Solution

11. The contraction of heart is called ..... while the relaxation of heart is called ..... .

Watch Video Solution

12. Cardiac centres are located in .....

Watch Video Solution

13. When a blood clot is formed inside a blood vessel, this condition is called ..... .

Watch Video Solution

14. ..... nerve fibres increase the rate of heart beat.

Watch Video Solution

15. The valve present between the right auricle and right ventricle is.....

Watch Video Solution

16. ..... are involved in blood clotting at the injury.

Watch Video Solution

17. ..... is the instrument to measure haemoglobin count of the blood.

Watch Video Solution

Quick Memory Choose The Correct Alternative

1. Annelids/Roundworms are the first animals to have blood vascular system.

Watch Video Solution

2. Blood/lymph is white vascular connective tissue.

Watch Video Solution

3. Person with AB/O blood group is called universal recipient.

Watch Video Solution

4. Problem of Erythroblastosis foetalis due to Rhincompatibility begins from first

pregnancy/second pregnancy.

Watch Video Solution

5. Heparin secreted by liver, mast cells and basophils promotes/ inhibits blood clotting.

Watch Video Solution

6. A two-layered sac surrounding the heart is pericardium/perichondrium.

Watch Video Solution

7. Mitral valve/semilunar valve lies between left auricle and left ventricle.

Watch Video Solution

8. Incomplete double circulation is found in reptiles/birds.

Watch Video Solution

9. SA node/AV node has more conductivity.

Watch Video Solution

10. Relaxation of heart is called systole/diastole.

Watch Video Solution

11. Repolarisation of the ventricles is represented by

Watch Video Solution

12. Severe and persistent chest pain occurs in Angina/hypertension.

Watch Video Solution

Revision Exercises Very Short Answer Questions

1. Name 2-layered sac surrounding the human heart .

Watch Video Solution

2. Whether human heart is myogenic or neurogenic?

Watch Video Solution

3. Name two heart sounds.

Watch Video Solution

4. What is the amount of blood ejected by the ventricles in one minute?

Watch Video Solution

5. Blood vessel which brings oxygenated blood to left auricle is

Watch Video Solution

6. Give the term for the formation and destruction of blood cells.

Watch Video Solution

7. What is blood coagulation?

Watch Video Solution

8. State the amount of blood in cardiac output at rest and exercise.

Watch Video Solution

9. Give the location of mitral valve and semilunar valves.

Watch Video Solution

10. Define hypertension.

Watch Video Solution

11. The most abundnt and least abundant cells of the blood are

Watch Video Solution

12. Which disorder is characterized by the formation of angina?

Watch Video Solution

13. Which corpuscles can undergo diapedesis?

Watch Video Solution

14. Where does cardiac impulses orginate?

Watch Video Solution

15. What is joint diastole?

Watch Video Solution

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

Watch Video Solution

17. Why is sinuatrial (SA) node also called the pacemaker of heart?

Watch Video Solution

18. Man has double circulation. Name the two circulations.

Watch Video Solution

19. Which tissue is called river of life?

Watch Video Solution

20. Give the terms for low WBC count and high WBC count.

Watch Video Solution

21. Normal level of haemoglobin per 100 ml of blood in a woman is

Watch Video Solution

22. A cardiologist observed an enlarged QR wave in the ECG of a patient. What does it indicate ?

Watch Video Solution

23. How is haemoglobin differently located in humans and earthworms ?

Watch Video Solution

24. A cardiologist observed an enlarged QR wave in the ECG of a patient. What does it indicate ?

Watch Video Solution

25. Name the cells that produce antibodies.

Watch Video Solution

26. What is atherosclerosis?

Watch Video Solution

27. What do you understand by polycythaemia?

Watch Video Solution

28. What happens in the lymphoid organs with respect to immunity?

Watch Video Solution

29. What is haemocoel?

Watch Video Solution

30. Name the granulocytes that are significant in allergic reactions.

Watch Video Solution

Revision Exercises Short Answer Questions

1. Differentiate between bicuspid and tricuspid valve.

Watch Video Solution

2. Distinguish between pulmonary circulation and systemic circulation.

Watch Video Solution

3. What is electrocardiogram ? Write about its significance.

Watch Video Solution

4. How is arteriosclerosis different from atherosclerosis ? Discuss.

Watch Video Solution

5. What is SA-node? Where is it located and what is its function?

Watch Video Solution

6. How are "Lub" and "Dup" sounds are produced during cardiac cycle?

Watch Video Solution

7. What is meant by systole? What happens to mitral valve and related blood flow during

ventricular systole?

Watch Video Solution

8. Name different types of granulocytes. Give the functions of one which constitutes maximum percentage of the total leucocytes.

Watch Video Solution

9. What is hypertension? How does it affect human health?

Watch Video Solution

10. Name the proteins present in blood plasma. What are their functions?

Watch Video Solution

11. Which two heart sounds are heard through the stethoscope when placed on the chest? When are these sounds produced respectively?

Watch Video Solution

12. How does haemoglobin help in the transport of oxygen from lung to tissue?

Watch Video Solution

13. Why does the left ventricle has a thicker wall than the right ventricle ? Explain.

Watch Video Solution

14. Differentiate between S.A. node and A.V. node.

Watch Video Solution

15. Differentiate between an artery and a vein.

Watch Video Solution

16. Differentiate between open and closed circulatory system.

Watch Video Solution

17. Write a short note on hypertension.

Watch Video Solution

18. Someone's finger gets cut accidentally while chopping vegetables and starts bleeding. The bleeding stops after a few minutes. What are the steps that lead to stoppage of bleeding?

Watch Video Solution

19. What is meant by double circulation ? Give its advantages.

Watch Video Solution

20. Differentiate between blood and lymph.

Watch Video Solution

21. Describe the process of blood clotting.

Watch Video Solution

22. Give the biochemical steps involved in the process of blood clotting

Watch Video Solution

23. Discuss the various functions of plasma.

Watch Video Solution

24. What is arteriosclerosis? Describe its affects on human health.

Watch Video Solution

25. Describe natural and artificial pace-maker of the heart.

Watch Video Solution

26. Explain the working of heart under: (i) Systole (ii) Diastole

Watch Video Solution

27. Draw a well labelled diagram of internal structure of human heart.

Watch Video Solution

Revision Exercises Long Answer Questions

1. Define the terms: (a) SA node (b) Diastole (c) Pulmonary circulation.

Watch Video Solution

2. Describe the internal structure of human heart with the help of a diagram. Show the flow of blood with arrows.

Watch Video Solution

3. Describe the conducting system of human heart.

Watch Video Solution

4. (a) What is double circulation? Name two circulations in man. Give its advantages.

(b) Name two heart sounds. How are they produced?

Watch Video Solution

5. Differentiate between the following: (a)SA node and AV node

(b) Myogenic and neurogenic heart.

Watch Video Solution

6. What is electrocardiography? What is meant by P-Q interval and S-T interval in the electrocardiography?

Watch Video Solution

7. Draw the internal structure of human heart.

Watch Video Solution

Competition File Objective Type Questions Multiple Choice Question Mcqs

1. Which one of the following mammalian cells is not capable of metabolising glucose to carbon-dioxide aerobically ?

A. Red blood cells

B. White blood cells

C. Unstrated muscle cells

D. Liver cells

Answer: A

 Watch Video Solution

2. A drop of each of the following, is placed separately on four sides. Which of them will not coagulate ?

A. Whole blood from pulmonary vein

B. Blood plasma

C. Sample from the thoracic duct of lymphatic system

D. Blood serum

Answer: D

3. An artifical pace-maker is implanted subcutaneously and connected to the heart in patients

A. Having 90% blockage of the three main coronary arteries

B. Having a very high blood pressure

C. With irregularity in the heart rhythm

D. Suffering from arteriosclerosis

Answer: C

Watch Video Solution

4. Which one of the following is a matching pair of a certain body feature and its value/count in a normal human adult

A. Urea 5-10 mg/100 ml of blood

B. Blood sugar (fasting) - 70-100 mg/100 ml

C. Total blood volume-5-6 litres

D. ESR in Wintrobe method - 9-15 mm in males and 20-34 mm in females

Answer: B

Watch Video Solution

5. What is correct regarding leucocytes?

A. These can squeeze out through the capillary walls

B. These are enucleate

C. Sudden fall in their number indicates cancer

D. These are produced in thymus

Answer: A

Watch Video Solution

6. Cockroach and other insects have blood which :

A. Resembles human blood in colour

B. Has RBCS

C. Circulates through arteries and veins

D. Circulates through an open system

Answer: D

Watch Video Solution

7. Hepatic portal system collect blood from

A. Liver

B. Lungs

C. Alimentary canal

D. Kidneys

Answer: C

Watch Video Solution

8. Carotid labyrinth contains

A. Olfactoreceptors

B. Baroreceptors

C. Chemoreceptors

D. Phonoreceptors

Answer: C

 Watch Video Solution

9. The valve situated between the left atrium and left ventricle is called :

(1) Bicuspid valve

(2) Tricuspid valve

(3) Mitral valve

(4) Eustachian tube

A. 1, 2 and 3 are correct

B. 1 and 2 are correct

C. 2 and 4 are correct

D. 1 and 3 are correct

Answer: D

Watch Video Solution

10. P wave of ECG indicates

1. activation of SA node

2. depolarization of atrial muslces

3. spread of excitation froom AV node ot Purkinje fibres

4. repolarization of atria and depolarization of ventricles

A. 1, 2 and 3 are correct

B. 1 and 2 are correct

C. 2 and 4 are correct

D. 1 and 3 are correct

Answer: B

Watch Video Solution

11. Which of the following is not phagocytic ?

A. Monocyte

B. Lymphocyte

C. Mast cell

D. Neutrophil

Answer: B

Watch Video Solution

12. in which of the following animals Hb (haemoglobin) is found dissolved in plasma

A. Earthworm

B. Cockroach

C. Sepia

D. Plenaria

Answer: A

Watch Video Solution

13. In haemoglobin which amino acid acts as blood buffer

A. Histidine

B. Glutamine

C. Aspartic acid

D. Lysine

Answer: C

Watch Video Solution

14. Which cell secretes antibody?

A. Lymphocyte

B. Monocyte

C. Eosinophil

D. Neutrophil

Answer: A

Watch Video Solution

15. Damage to thymus in a child may lead to

A. Reduction of haemoglobin content of blood

B. Reduction in stem cell production

C. Loss of Antibody-mediated immunity

D. Loss of cell-mediated immunity

Answer: D

Watch Video Solution

16. Which of the following substances if introduced in the blood stream, would cause coagulation at the site of its introduction?

A. Fibrinogen

B. Prothrombin

C. Thromboplastin

D. Heparin

Answer: C

Watch Video Solution

17. Cardiac output is determined by

A. Heart rate

B. Stroke volume

C. Blood flow

D. Both (a) and (b)

Answer: D

Watch Video Solution

18. Important function of lymph is

A. Transport oxygen to the brain

B. Transport CO_2 to the lungs

C. Return RBCs to lymph nodes

D. Return interstitial fluid to the blood

Answer: D

Watch Video Solution

19. Pylangium in frog is located in :

A. Conus arteriosus

B. Sinus venosus

C. Atrium

D. Ventricle

Answer: A

 Watch Video Solution

20. Papillary muscles are located in

A. Heart ventricles of rabbit

B. Dermis of mammalian skin

C. Orbits of vertebrate's eyes

D. Pylorus of vertebrate stomach

Answer: A

Watch Video Solution

21. A heart " murmur" disorder indicates a defect of : —

A. Bundle of His

B. Heart valves

C. Sinuatrial node

D. Atrioventricular node

Answer: B

Watch Video Solution

22. Which one of the following is correct?

A. Blood - Plasma + RBCs + WBCs + Platelets

B. Plasma = Blood - Lymphocytes

C. Neuron Cyton + Dendron + Axon + Synapse

D. Lymph = Plasma + WBCs + RBCs

Answer: A

Watch Video Solution

23. The largest RBCs have been seen in

A. Elephant

B. Whale

C. Amphiuma

D. Man

Answer: C

Watch Video Solution

24. Which among the following statements are correct and which are wrong ?

1. Plasma constitutes $45\ \%$ of blood.

2. Albumin is plasma protein involved in osmotic balance,

3. Blood clotting factors are present in blood.

4. Plasma without clotting factors is serum.

5. Minerals are not found in blood

A. Only E is wrong while all other statements are correct

B. A and B are correct but C, D and E are wrong

C. B and D are correct but A, C and E are wrong

D. B,C and D are correct but A and E are wrong

Answer: D

Watch Video Solution

25. Choose the correct pathway of the transmission of impulses in the heart beat :

A. AV node $\rightarrow$ SA node $\rightarrow$ Bundle of His $\rightarrow$ Purkinje fibres

B. SA node $\rightarrow$ AV node $\rightarrow$ Bundle of His $\rightarrow$ Purkinje fibres

C. SA node $\rightarrow$ Bundle of His $\rightarrow$ AV node $\rightarrow$ Purkinje fibres

D. AV node $\rightarrow$ Bundle of His $\rightarrow$ SA node $\rightarrow$ Purkinje fibres

Answer: B

Watch Video Solution

26. On an ECG, the depolarization of atria is indicated by

A. P-wave

B. Q-wave

C. R-wave

D. S-wave

Answer: A

27. Maximum surface area of circulatory system is of

A. Heart

B. Capillaries

C. Arterioles

D. Veins

Answer: B

Watch Video Solution

28. Absence of circulatory system in Hydra is compensated by

A. Pseudocoelomic fluid

B. Gastrovascular cavity

C. Presence of tentacles

D. None of these

Answer: B

 Watch Video Solution

29. Irregular nuclei is present in

Or

Which white blood cell releases chemical to inhibit blood clotting

A. Neutrophils

B. Basophils

C. Eosinophils

D. Monocytes

Answer: A

 Watch Video Solution

30. "Bundle of His" is formed of

A. Nervous tissue supplied to ventricles

B. Nervous tissue supplied to heart

C. Muscular tissue supplied to ventricles

D. Muscular tissue supplied to heart

Answer: C

Watch Video Solution

31. Nucleated RBCs are found in

A. Man

B. Rat

C. Rabbit

D. Frog

Answer: D

Watch Video Solution

32. Heparin is secreted by

A. Mast cells

B. Goblet cells

C. Oxyntic cells

D. All of these

Answer: A

Watch Video Solution

33. Artery is a blood vessel which carries blood

A. Away from the heart

B. Towards the heart

C. Has deoxygenated blood without exception

D. None of these

Answer: A

Watch Video Solution

34. Which animal has most mixing of oxygenated and deoxygenated blood in the ventricles?

A. Scoliador

B. Rabbit

C. Frog

D. None of these

Answer: C

Watch Video Solution

35. Blood enters the heart because muscles of the

A. Atria relax

B. Ventricles contract

C. Ventricles relax

D. Atria contract

Answer: A

Watch Video Solution

36. In humans, blood passes from the post caval to the diastomic right atrium of heat due to

A. Stimulation of sinu-auricular node

B. Pushing open of the venous valves

C. Pressure difference between post caval and atrium

D. Suction pull

Answer: C

Watch Video Solution

37. the haemoglobin of a human foetus

A. Has only 2 protein subunits instead of 4

B. Has a higher affinity for oxygen than that of an adult

C. Has a lower affinity for oxygen than that of an adult

D. its affinity for oxygen is the same as that of an adult

Answer: B

Watch Video Solution

38. Heart beat can be initiated by

The cardiac pacemaker in a patient fails to function normally . The doctors find that an artificial pacemaker is to be grafted in him. It is likely that it will be grafted at the site of

A. Atrioventricular bundle

B. Purkinje system

C. Sinu-atrial node

D. Atrio-ventricular node

Answer: C

Watch Video Solution

39. Heparin is synthesised in

A. Liver

B. Kidneys

C. Salivary glands

D. Pancreas

Answer: A

Watch Video Solution

40. The vitamin, which is essential for blood clotting is

A. Vitamin-A

B. Vitamin-B

C. Vitamin-C

D. Vitamin-K

Answer: D

Watch Video Solution

41. Haemoglobin is a:

1. Oligomeric protein 2. Chromoprotein 3. Monomeric protein 4. Keratin

A. 1, 2 and 3 are correct

B. 1 and 2 are correct

C. 2 and 4 are correct

D. 1 and 3 are correct

Answer: B

 Watch Video Solution

42. Blood does not clot inside the vessels because :

1. Constant speedy flow of blood prevents accumulation of fibrin threads, if at all formed

2. Absence of heparin, an anticoagulant having antithrombin activity, in blood

3. Smoothness of endothelial lining of vessels prevents rupture of platelets to release thromboplastin

4. Presence of monomolecular layer of -vely charged proteins on inner surface of endothelium

A. 1, 2 and 3 are correct

B. 1 and 2 are correct

C. 2 and 4 are correct

D. 1 and 3 are correct

Answer: D

Watch Video Solution

43. Which one of the following is a matching pair

A. Lubb - Sharp closing of AV-valves at the beginning of ventricular systole

B. Dup - Sudden opening of semilunar valves at the beginning of ventricular diastole

C. Pulsation of radial artery valves in the blood vessels

D. Initiation of the heart beat - Purkinje fibres

Answer: A

Watch Video Solution

44. Haemoglobin is

A. Reproductive pigment

B. Respiratory pigment

C. Carbohydrate

D. Fat

Answer: B

Watch Video Solution

45. "Bundle of His" is formed of mainly:

A. Nervous tissue supplied to ventricles

B. Nervous tissue supplied to heart

C. Muscular tissue supplied to ventricles

D. Muscular tissue supplied to heart

Answer: C

Watch Video Solution

46. Haemophilia is due to absence of:

A. Factor VI

B. Factor VII

C. Factor-VIII

D. Factor-X

Answer: C

Watch Video Solution

47. Histamine and heparin are secreted by:

A. Monocytes

B. Neutrophils

C. Eosinophils

D. Basophils

Answer: D

 Watch Video Solution

48. Open circulatory system is present in :

(A) Arthropods (B) Annelids (C) Chordates (D) Molluscs

A. C only

B. B and C only

C. A and B only

D. A and D only

Answer: D

Watch Video Solution

49. The opening between the right atrium and the right ventricle is guarded by which valve ?

A. Mitral valve

B. Pulmonary semilunar valves

C. Aortic semilunar vaives

D. Tricuspid valve

Answer: D

Watch Video Solution

50. Which of the following is not the cellular element of blood?

A. T-cells

B. B-cells

C. Plasma

D. Monocytes

Answer: C

Watch Video Solution

51. In human beings, duration of cardiac cycle is

A. 0.08 second

B. 0.5 second

C. 0.8 second

D. 8.0 second

Answer: C

 Watch Video Solution

52. Which of the following statements is related to Starling's law of heart

A. Greater is the stroke volume, greater is the heart rate

B. Greater is the initial length of cardiac muscle fibre, more is the force of contraction of heart

C. Greater is the minute volume, greater is the heart rate

D. Lesser is the length of cardiac muscle fibre, greater is the force of contraction of heart

Answer: B

Watch Video Solution

53. The absence of which clotting factor leads to haemophilia-A?

A. Factor VII

B. Factor VII

C. Factor IX

D. Factor X

Answer: B

Watch Video Solution

54. What prevents clotting of blood inside the blood vessels?

A. Heparin

B. Serotonin

C. Fibrinogen

D. Fibrin

Answer: A

 Watch Video Solution

55. In a standard ECG which one of the following alphabets is the correct representation of the respective activity of the human heart ?

A. R - Repolarization of ventricles

B. S - Start of systole

C. T- End of systole

D. P - Depolarization of atria

Answer: D

Watch Video Solution

56. The most popularly known blood grouping is the ABO grouping. It is named ABO and not ABC, because "O" in it refers to having

A. Other antigens besides A and B on RBCs

B. Over dominance of "O' on the genes for A and B types

C. One antibody only either anti-A or anti-B on RBCs.

D. No antigens A and B on RBCs

Answer: D

Watch Video Solution

57. Globulins contained in human blood plasma are primarily involved in

A. Defence mechanism of body

B. Osmotic balance of body fluids

C. Oxygen transport in the blood

D. Clotting of blood

Answer: A

 Watch Video Solution

58. The letter T in T-lymphocytes refers to

A. Thyroid

B. Thalamus

C. Tonsil

D. Thymus

Answer: D

Watch Video Solution

59. Which of the following matches correctly?

A. Factor - II : Thromboplastin

B. Factor -IV: Prothrombin

C. Factor - VIII: Antihaemophilic globulin

D. Factor XII : Haemophilic

Answer: C

Watch Video Solution

60. Which of the following matches correctly ?

A. Inferior vena cava - Receives deoxygenated blood from head and body

B. Superior vena cava - Receives deoxygenated blood from lower body organs

C. Pulmonary artery - Carries deoxygenated blood to the lungs

D. Hepatic artery - Carries deoxygenated blood to the gut

Answer: C

Watch Video Solution

61. The thread like tendons of papillary nuscles inserted upon the flaps of tricuspid and bicuspid valves are

A. Chordae tendinae

B. Yellow elastin fibres

C. Reticulate fibres

D. Collagen fibres

Answer: A

Watch Video Solution

62. Mitral valve is present between

A. Right atrium and right ventricle

B. Left atrium and left ventricle

C. Right and left ventricles

D. Left ventricle and aorta

Answer: B

Watch Video Solution

63. the process of formation of RBCs is called

A. Poikegenesis

B. Leucopoeisis

C. Erythropoeisis

D. None of these

Answer: C

Watch Video Solution

64. Antibodies are produced by

A. Leucocytes

B. Lymphocytes

C. Erythrocytes

D. Blood platelets

Answer: B

Watch Video Solution

65. Which of the following has closed circulatory system ?

A. Arthropods

B. Molluscs

C. Platyhelminthes

D. Annelids

Answer: D

 Watch Video Solution

66. Blood group agglutinogen is

A. Glycoprotein

B. Phosphoprotein

C. Haemoprotein

D. Phospholipid

Answer: A

Watch Video Solution

67. Erythropoiesis starts in

A. Kidneys

B. Liver

C. Spleen

D. Red bone marrow

Answer: D

Watch Video Solution

68. Papillary muscles are found in mammalian

A. Auricles

B. Ventricles

C. Pinna

D. Eyes

Answer: B

Watch Video Solution

69. Given below are four statements (i-iv) regarding human blood circulatory system

(i) Arteries are thick-walled and have narrow lumen as compared to veins

(ii) Angina is acute chest pain when the blood circulation to the brain is reduced

(iii) Persons with blood group AB can donate blood to any person with any blood group under ABO system

(iv) Calcium ions play a very important role in blood clotting

Which two of the above statements are correct ?

A. (i) & (iv)

B. (i) & (ii)

C. (ii) & (iii)

D. (iii) & (iv)

Answer: A

Watch Video Solution

70. Pulmonary vein carries

A. Deoxygenated blood

B. Oxygenated blood

C. Mixed blood

D. None of these

Answer: B

Watch Video Solution

71. Blood clotting corpuscle is

A. Thrombocyte

B. Monocyte

C. Lymphocyte

D. Erythrocyte

Answer: A

Watch Video Solution

72. When red blood corpuscles containing both A and B antigens are mixed with your blood serum, they agglutinate. Hence you blood group is.....type.

A. AB

B. O

C. A

D. B

Answer: B

Watch Video Solution

73. If the systolic pressure is 120 mm Hg and diastolic pressure is 80 mm Hg, the pulse pressure is _____

A. $120 \times 80 = 9600$ mm Hg

B. $120 + 80 = 200$ mm Hg

C. $120 - 80 = 40$ mm Hg

D. $120/80 = 1.5$ Hg

Answer: C

Watch Video Solution

74. Which of the following is not a granulocyte

A. Monocyte

B. Eosinophils

C. Basophils

D. Neutrophils

Answer: A

Watch Video Solution

75. Mature erythrocyte cannot utilise glucose because they lack

A. Golgi complex

B. Enzymes

C. Mitochondria

D. Nucleus

Answer: C

Watch Video Solution

Watch Video Solution

76. In order for the blood to flow from right ventricle to left ventricle in mammalian heart, it must flow through

A. Right ventricle, Pulmonary arteries, Lungs, Pulmonary veins, Left atrium

B. Right ventricle, Pulmonary veins, Lungs, Pulmonary arteries, Left atrium

C. Right ventricle, Right atrium, Lungs, Pulmonary veins, Left atrium

D. Right ventricle, Systemic aorta, Lungs, Pulmonary veins, Left atrium

Answer: A

Watch Video Solution

77. The most important mineral for blood coagulation is :

A. Calcium

B. Magnesium

C. Sodium

D. Iron

Answer: A

Watch Video Solution

78. Pacemaker of the heart .

A. AV-node

B. SV-node

C. SA-node

D. M-node

Answer: C

Watch Video Solution

79. Which of the following is not a major organ of lymphatic system

A. Lymph nodes

B. Thymus

C. Kidneys

D. Spleen

Answer: C

Watch Video Solution

80. Find out the wrong match:

A. Eosinophils - Allergic response

B. Basophils - Secrete histamine & serotonin

C. Neutrophils - Phagocytic & eat foreign organisms

D. Monocytes-Secrete heparin

Answer: D

 Watch Video Solution

81. The blood does not clot inside the body because of

A. Oxygenation of blood

B. Movement of blood

C. Heparin in blood

D. Absence of fibrinogen in blood

Answer: C

Watch Video Solution

82. Red cell count is carried out by

A. Haemocytometer

B. Haemoglobinometer

C. Sphygmomanometer

D. Electrocardiogram

Answer: A

Watch Video Solution

83. Which has the thickest walls : —

A. Right auricle

B. Right ventricle

C. Left auricle

D. Left ventricle

Answer: D

Watch Video Solution

84. Difference between systolic and diastolic blood pressure is

A. 120 mm Hg

B. 80 mm Hg

C. 40 mm Hg

D. 200 mm Hg

Answer: C

Watch Video Solution

85. In the clotting mechanism pathway , thrombin activates factors

A. XI, VIII,V

B. XI, IX, X

C. VIII, X, V

D. IX, VIII, X

Answer: A

 Watch Video Solution

86. Bundle of His is a part of which one of the following organs in humans

A. Brain

B. Heart

C. Kidney

D. Pancreas

Answer: B

Watch Video Solution

87. Which one of the following plasma protein is involved in the coagulation of blood ?

A. An albumin

B. Serum amylase

C. A globulin

D. Fibrinogen

Answer: D

Watch Video Solution

88. Arteries are best defined as the vessels which

A. Supply oxygenated blood to different organs

B. Carry blood away from the heart to different organs

C. Break up into capillaries which reunite to form a vein

D. Carry blood from one visceral organ to another visceral organ

Answer: B

 Watch Video Solution

89. which one of the following statement is correct regarding blood pressure

A. 130/90 mm Hg is considered high and requires treatment

B. 100/55 mm Hg is considered an ideal blood pressure

C. 105/50 mm Hg makes one active

D. 190/110 mm Hg may harm vital organs like brain and kidney

Answer: D

90. Histamine, serotonin and heparin are secreted by

A. Lymphocytes

B. Monocytes

C. Neutrophils

D. Basophils

Answer: D

Watch Video Solution

91. The volume of blood each ventricle pumps out during a cardiac cycle is about

A. 70 ml

B. 5000 ml

C. 7 ml

D. 1200 ml

Answer: A

92. Erythropoeitin is secreted from

A. Pituitary gland

B. Pancreas

C. Adrenal gland

D. Kidney

Answer: D

Watch Video Solution

93. A patient brought to a hospital with myocardial infraction is normally immediately given

A. Penicillin

B. Streptokinase

C. Cyclosporin-A

D. Statins

Answer: B

Watch Video Solution

94. Ventricular diastole occurs due to a / an

A. Organ-system

B. Cell organelle

C. Tissue

D. Organ

Answer: C

Watch Video Solution

95. The duration of cardiac cycle is

A. 0.6 seconds

B. 0.6 minutes

C. 0.8 seconds

D. 0.8 minutes

Answer: C

Watch Video Solution

96. The other term for heart attack is

A. Coronary thrombosis

B. Myocardial infarction

C. Cardiac arrest

D. Ischaemia

Answer: B

 Watch Video Solution

97. The thickening of walls of arteries is called

A. Arteriosclerosis

B. Arthritis

C. Aneurysm

D. Both (b) and (c)

Answer: A

 Watch Video Solution

98. The heart beat increases at the time of interview due to

A. Secretion of adrenaline

B. Secretion of corticotrophic hormone

C. Hypersecretion of renin

D. Secretion of antidiuretic hormone

Answer: A

Watch Video Solution

99. The problem of electrical discontinuity caused in the normal heart by the connective tissue separating the atria from the ventricles is solved by

A. Coordinating electrical activity in the atria with electrical activity in the ventricles by connecting them via the bundle of His

B. Having the AV-node functioning as a secondary pace maker

C. Having an ectopic pace maker

D. Coordinating electrical activity in the atria with electrical activity in the ventricles by connecting them via the vagus nerve

Answer: A

Watch Video Solution

100. Lub sound produced by heart is caused by

A. Ventricular diastole

B. Ventricular systole

C. Atrial diastole

D. Atrial systole

Answer: B

Watch Video Solution

101. The triangular sac like structure which receives blood through the vena cava in frog is

Which of the following structure is absent in rabbit's heart

A. Ventricle

B. Sinus venosus

C. Hepatic portal system

D. Conus arteriosus

Answer: B

 Watch Video Solution

102. Read the statements regarding the cardiac system and choose the right option

Human heart is an ectodermal derivative

Mitral valve guards the opening between the right atrium and left ventricle

SAN is located on the left upper corner of the right atrium

Stroke volume $\times$ Heart rate = Cardiac output

A. A alone is correct

B. B and C alone are correct

C. A and B alone are correct

D. D alone is correct

Answer: D

Watch Video Solution

103. Choose the correct statement:

A. The T-wave in an ECG represents excitation of ventricles

B. The sum of P and T waves in a given time period can determine the heart beat

rate of an individual

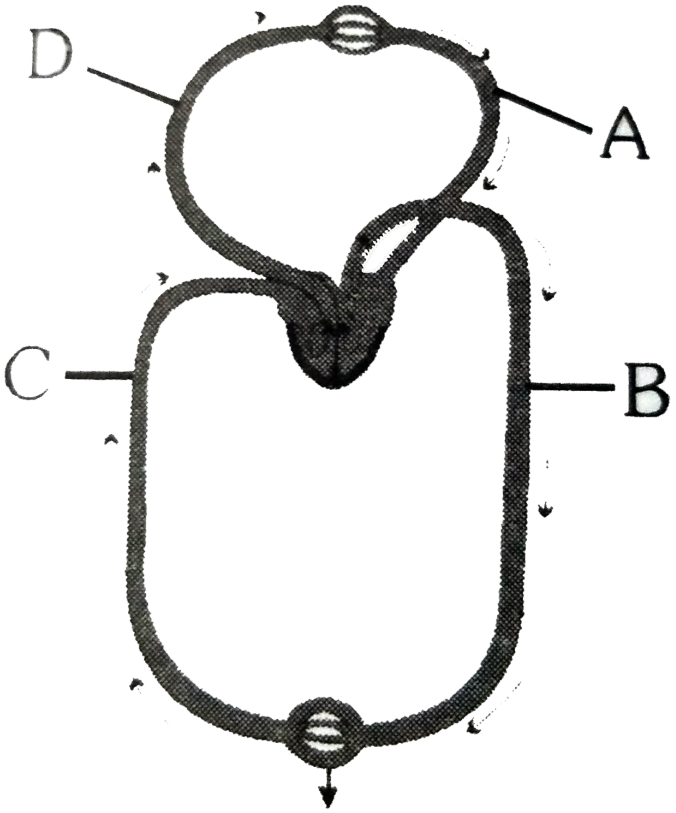
C. The end of the P Wave marks the end of the systole

D. In a standard ECG, a person is connected to the machine with three electrical leads

Answer: D

Watch Video Solution

104. Figure shoes schematic plan of blood circulation in humans with labels A to D, Identify the label and give its function / s.



A. A-Pulmonary vein-takes impure blood from body parts, PO_2=60 mg Hg

B. B-Pulmonary artery takes blood from heart to lungs, PO_2 = 90 mm Hg

C. C-Vena Cava-takes blood from body parts to right auricle, PCO_2 = 45 mm Hg

D. D-Dorsal aorta-takes blood from heart to body parts, PO_2 = 95 mm Hg

Answer: C

Watch Video Solution

105. The diagram given here is the standard ECG of a normal person. The P-wave represents the

A. Contraction of both atria

B. Initiation of ventricular contraction

C. Beginning of systole

D. End of systole

Answer: A

Watch Video Solution

106. Pulse is a direct measure of:

A. Blood pressure

B. Stroke volume

C. Cardiac output

D. Heart rate

Answer: D

Watch Video Solution

107. Originating in bone marrow , circulating in blood for 1-2 days migrating to connective tissue and forming macrophages is a characteristic of

A. Eosinophils

B. Bosophils

C. Monocytes

D. Lymphocytes

Answer: C

Watch Video Solution

108. Person with blood group AB is considered as universal recipient because he has

A. No antigen on RBCs and no antibody in the plasma

B. Both A and B antigens in the plasma but no antibodies

C. Both A and B antigens on RBCs but no antibodies in plasma

D. Both A and B antibodies in the plasma

Answer: C

Watch Video Solution

109. How do parasympathertic neural signals affect the working the heart

A. Both heart rate and cardiac output increase

B. Heart rate decreases but cardiac output increases

C. Reduce both heart rate and cardiac output

D. Heart rate is increased without affecting cardiac output

Answer: C

Watch Video Solution

110. Blood pressure in the mammalian aorta is maximum during

A. Systole of left atrium

B. Diastole of right ventricle

C. Systole of left ventricle

D. Diastole of right atrium

Answer: C

Watch Video Solution

111. Which one of the following is correct

A. Plasma = Blood - Lymphocytes

B. Serum = Blood + Fibrinogen

C. Lymph = Plasma + RBC + WBC

D. Blood - Plasma + RBC + WBC + Plateletes

Answer: D

Watch Video Solution

112. Erythropoiesis starts in

A. Kidney

B. Liver

C. Spleen

D. Red Bone marrow

Answer: B

 Watch Video Solution

113. Which one of the following animals has two separate circulatory pathways

A. Frog

B. Lizard

C. Whale

D. Shark

Answer: C

Watch Video Solution

114. Doctors use stethoscope to hear the sounds produced during each cardiac cycle. The second sound is heard when

A. AV valves open up

B. Ventricular walls vibrate due to gushing of blood from atria.

C. Semilunar valves close down after the blood flows into vessels from ventricles.

D. AV node recives signals from SA node

Answer: C

Watch Video Solution

115. The study of blood vessels is termed as

A. Angiology

B. Cardiology

C. Haematology

D. Histology

Answer: A

 Watch Video Solution

116. Heavines with sever chest pain which may disappear with rest indicates

A. Angina pectoris

B. Atherosclerosis

C. Arteriosclerosis

D. Hyperthyroidism

Answer: A

Watch Video Solution

117. Incomplete double circulation is found in : —

A. Fish

B. Amphibians

C. Birds

D. Mammals

Answer: B

Watch Video Solution

118. Choose the correct statement among the following

A. AV node is the pacemaker that generates action potential and initiates atrial systole.

B. During each cardiac cycle, the 'lubb' sound is due to closure of semilunar valves.

C. Stroke volume in each cardiac stroke is about 170 ml. of blood.

D. QRS complex in the ECG indicates depolarization of ventricles

Answer: D

Watch Video Solution

119. Name the blood cells, whose reduction in number can cause clotting disorder, leading to excessive loss of blood from the body.

A. Thrombocytes

B. Erythrocytes

C. Leucocytes

D. Neutrophils

Answer: A

Watch Video Solution

120. Serum differs from the blood in:

A. Lacking antibodies

B. Lacking globulins

C. Lacking albumins

D. Lacking clotting factors

Answer: D

 Watch Video Solution

121. Blood pressure in the pulmonary artery is

A. Less than that in the venae cavae

B. Sarne as that in aorta

C. More than that in the carotid

D. More than that in pulmonary veins

Answer: D

 Watch Video Solution

122. Adult human RBCs are enucleate. Which of the following statement (s) is/are most appropriate explanation for this feature ?

(1) They do not need to reproduce

(2) They are somatic cells

(3) They do not metabolise

(4) All their internal space is available for oxygen transport.

A. Only (4)

B. Only (1)

C. (3) and (4)

D. (2) and (3)

Answer: A

Watch Video Solution

123. The hepatic portal vein drains blood to liver from

A. Heart

B. Stomach

C. Kidneys

D. Intestine

Answer: D

Watch Video Solution

124. Match the items given in column I with those in column II and select the correct option given below.

Column I		Column II
A. Tricuspid valve	(*i*)	Between left atrium and left ventricle
B. Bicuspid valve	(*ii*)	Between right ventricle and pulmonary artery
C. Semilunar valve	(*iii*)	Between right atrium and right ventricle

A. $\begin{matrix} 1 & 2 & 3 \\ I & ii & iii \end{matrix}$

B. $I \quad iii \quad ii$

C. $iii \quad I \quad iii$

D. $ii \quad I \quad iii$

Answer: C

Watch Video Solution

125. Match the items given in column-I with those in column-II and select the correct option from given below:

	Column-I		Column-II
1.	Fibrinogen	(i)	Osmotic balance
2.	Globulin	(ii)	Blood clotting
3.	Albumin	(iii)	Defence mechanism

A. (1)(i) ,(2)(iii),(3)(ii)

B. (1)(i) ,(2)(ii),(3)(iii)

C. (1)(iii),(2)(ii) ,(3)(i)

D. (1)(ii),(2)(iii) ,(3)(i)

Answer: D

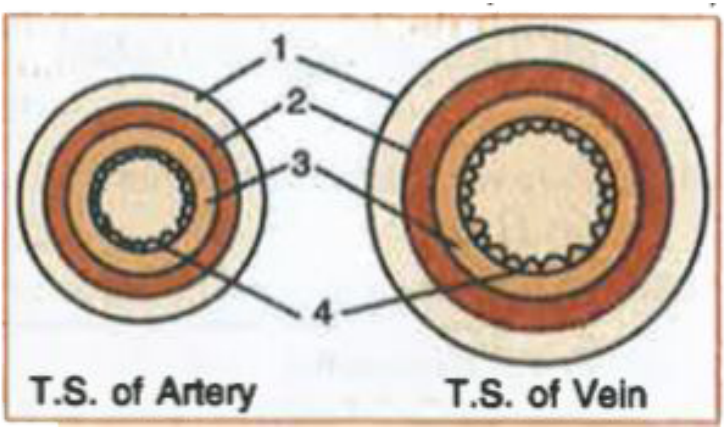
Watch Video Solution

Competition File Objective Type Questions Cbse Pmt Main Examination Questions

1. Draw the internal structure of heart showing conducting system .

Watch Video Solution

2. Identify structures 1,2,3 ,4 from the given diagram.



(b) Fill in the blanks . The poorly oxygenated blood comes from the body parts and poured into (1) and then pumped into (2) from which, through (3) artery to lungs. Then from lungs

oxygenated blood enters into (4) through pulmonary (5). Then pumped into (6) from this the oxygenated blood passes through (7) to the body except lungs.

Watch Video Solution

3. What do P-wave and QRS-complex represent and what they initiate/lead to?

Watch Video Solution

4. If due to some injury the chordae tendineae of the tricuspid valve of the human heart is partially non-functional, what will be the immediate effect ?

A. The flow of blood into the aorta will be slowed down

B. The "pacemaker" will stop working

C. The blood will tend to flow back into the left atrium

D. The flow of blood into the pulmonary artery will be reduced

Answer: D

Watch Video Solution

5. What is true about RBCs in humans?

A. They carry about 22-25 per cent of CO_2

B. They transport 99.5 per cent of O_2

C. They transport about 80 per cent oxygen only and rest 20 per cent of it is transported in dissolved state in blood plasma

D. They do not carry CO_2 at all

Answer: A

 Watch Video Solution

6. Which two of the following changes (A-B) usually tend to occur in the plain dwellers when they move to high altitudes (3500 m or more)

(A) Increase in red blood cell size

(B) Increase in red blood cell production

(C) Increased breathing rate

(D) Increase in thrombocyte count

A. (ii) and (iii)

B. (iii) and (iv)

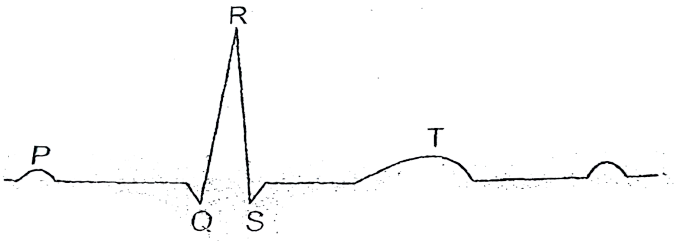
C. (i) and (iv)

D. (i) and (ii)

Answer: A

Watch Video Solution

7. Given below is the ECG of a normal human. Which of its components is correctly interpreted below ?



A. Peak P and Peak R together -Systemic and diastolic blood pressure

B. Peak P-Initiation of left atrial contraction only

C. Complex QRS - One complete pulse

D. Peak T-Initiation of total cardiac contraction

Answer: C

Watch Video Solution

Competition File Objective Type Questions

Matching Type Questions

1. Match the terms in Column A with suitable terms in Column B :

Column A	Column B
(i) Polycythaemia	(a) Cholesterol
(ii) Blood platelets	(b) Angina
(iii) Diapedesis	(c) Antigens
(iv) Atheroma	(d) Increase in RBC count
(v) Hypertension	(e) Leucocytes
(vi) Antibody-generating chemicals	(f) Thromboplastin

Watch Video Solution

2. Match the types of WBC listed in Column I with the shape of nucleus given under Column

II. Choose the answer which gives the correct combination of alphabets of two columns.

	Column I (Type of WBC)		Column II (Shape of nucleus)
A	Neutrophils	p	Kidney-shaped
B	Eosinophils	q	S-shaped
C	Basophils	r	3 to 5 - lobed
D	Monocytes	s	2 - lobed
		t	Disc-shaped

Watch Video Solution

Competition File Objective Type Questions Mcqs

1. Hirudin is

A. A protein produced by Hordeum vulgare, which is rich in lysine

B. A toxic molecule isolated from Gossypium hirsutum, which reduces human fertility

C. A protein produced from transgenic Brassica napus, which prevents blood clotting

D. An antibiotic produced by a genetically engineered bacterium, Escherichia coli

Answer: C

Watch Video Solution

2. Lymphoid tissue is found in

A. Thymus

B. Tonsils

C. Lymph nodes

D. All of these

Answer: D

Watch Video Solution

3. Pacemaker is

A. AV-node

B. SA-node

C. Bundle of His

D. Ventricular muscles

Answer: B

Watch Video Solution

4. In frog heart there are cardiac muscles which consist of fibres called

A. Purkinje fibres

B. Myonemes

C. Telodendria

D. Columneae carnae

Answer: A

Watch Video Solution

5. Spleen is referred to as :

A. Temporary endocrine gland

B. Graveyard of RBCs

C. Largest gland of body

D. Store house of WBCs

Answer: B

 Watch Video Solution

6. Heart muscle is sensitive to

A. Electrical stimuli

B. Chemical stimuli

C. Mechanical stimuli

D. All of these

Answer: D

 Watch Video Solution

7. Pernicious anaemia is:

A. Low RBC count

B. Death of WBCs

C. Destruction of RBC maturation

D. Destruction of young RBCs

Answer: C

Watch Video Solution

8. Tissue plasmin activator:

A. Helps in wound healing

B. Dissolves clot in blood vessels of heart

C. Allergy response

D. None of these

Answer: B

 Watch Video Solution

9. Which one of the following is the main graveyard of RBC : —

A. Spleen

B. Liver

C. Kidney

D. Thymus

Answer: A

Watch Video Solution

10. SA node is located in

A. Lower lateral wall of right atrium

B. Upper lateral wall of right atrium

C. Upper lateral wall of left atrium

D. Lower lateral wall of left atrium

Answer: B

Watch Video Solution

11. Blood vascular system of earthworm is of

A. Open type with Hb in RBCs

B. Open type with Hb in plasma

C. Closed type with Hb in RBCs

D. Closed type with Hb in plasma

Answer: D

Watch Video Solution

12. Which leucocytes release heparin and histamines in the blood?

A. Eosinophil

B. Basophil

C. Neutrophil

D. Lymphocytes

Answer: B

 Watch Video Solution

13. Statements

A-Carbonic anhydrase is present in the erythrocytes.B-In erythrocytes the

carbondioxide combine with water and is transported.

A. Statement (i) is correct and is responsible for statement (ii)

B. Both statements (1) and (ii) are wrong

C. Statement (i) is correct but not involved in statement (ii)

D. Statement (i) is not correct but statement (ii) is correct

Answer: A

Watch Video Solution

14. Heart beat is initiated by

A. Auriculo ventricular node

B. Sino-auricular node

C. Bundle of His

D. Purkinje fibres

Answer: B

Watch Video Solution

15. What would be the heart rate of a person if the cardiac output is 5 L, blood volume in the ventricles at the end of diastole is 100 mL and at the end of ventricular systole is 50 mL ?

A. 50 beats per minute

B. 75 beats per minutes

C. 100 beats per minutes

D. 125 beats per minute

Answer: c

 Watch Video Solution

Chapter Practice Test

1. Why is person with O-blood group called universal donor?

 Watch Video Solution

2. What is pericardium?

 Watch Video Solution

3. State the effect of parasympathetic nerve fibres on rate of heartbeat.

Watch Video Solution

4. Define pulse pressure.

Watch Video Solution

5. Define cardiac output. Which two factors determine the cardiac output?

Watch Video Solution

6. Differentiate between an artery and a vein.

Watch Video Solution

7. What is blood clotting? Name the proteins of blood plasma involved in the process.

Watch Video Solution

8. Differentiate between atrial systole and ventricular systole.

Watch Video Solution

9. What is meant by double circulation? What is its significance?

Watch Video Solution

10. Write a note on erythroblastosis foetalis. How it can be prevented

Watch Video Solution

11. What are nodal tissues? How they regulate the initiation of heartbeat ?

Watch Video Solution

12. Define ECG. What do P, QRS and T-waves indicate. Give significance of ECG.

Watch Video Solution

13. Enlist the causes and symptoms of angina pectoris and hypertension.

Watch Video Solution

14. Differentiate between open and closed type circulatory system with reference to occurrence, position of blood and significance.

Watch Video Solution

15. (a)Draw a labelled diagram of internal structure of human heart.

(b) What are chordae tendinae? Give their function.

Watch Video Solution