

Body Fluids & Circulation

Very Short Answer Type Questions

1. Name the blood component which is viscous and straw coloured fluid.
2. Complete the missing word in the statement given below:
 - a. Plasma without _____ factors is called serum.
 - b. _____ and monocytes are phagocytic cells.
 - c. Eosinophils are associated with _____ reactions.
 - d. _____ ions play a significant role in clotting.
 - e. One can determine the heart beat rate by counting the number of _____ in an ECG.
3. Given below is the diagrammatic representation of a standard ECG. Label its different peaks.



4. Name the vascular connection that exists between the digestive tract and liver.
5. Given below are the abnormal conditions related to blood circulation.
Name the disorders.
 - a. Acute chest pain due to failure of O₂ supply to heart muscles
 - b. Increased systolic pressure
6. Which coronary artery diseases is caused due to narrowing of the lumen of arteries?
7. Define the following terms and give their location?
 - a. Purkinje fibre
 - b. Bundle of His

8. State the functions of the following in blood
 - a. Fibrinogen
 - b. Globulin
 - c. Neutrophils
 - d. Lymphocytes
9. What physiological circumstances lead to erythroblastosis fetalis?
10. Explain the consequences of a situation in which blood does not coagulate.
11. What is the significance of time gap in the passage of action potential from sino-atrial node to the ventricle?
12. How will you interpret an electrocardiogram (ECG) in which time taken in QRS complex is higher.

Short Answer Type Questions

1. The walls of ventricles are much thicker than atria. Explain.
2. Differentiate between
 - a. Blood and Lymph
 - b. Basophils and Eosinophils
 - c. Tricuspid and bicuspid valve
3. Briefly describe the followings:
 - a. Anaemia
 - b. Angina Pectoris
 - c. Atherosclerosis
 - d. Hypertension
 - e. Heart failure
 - f. Erythroblastosis fetalis

4. Explain the advantage of the complete partition of ventricle among birds and mammals and hence leading to double circulation.
5. What is the significance of hepatic portal system in the circulatory system?
6. Explain the functional significance of lymphatic system?
7. Write the features that distinguish between the two
 - a. Plasma and Serum
 - b. Open and closed circulatory system
 - c. Sino-atrial node and Atrio-ventricular node
8. Thrombocytes are essential for coagulation of blood. Comment.
9. Answer the following
 - a. Name the major site where RBCs are formed.
 - b. Which part of heart is responsible for initiating and maintaining its rhythmic activity?
 - c. What is specific in the heart of crocodiles among reptilians?

Long Answer Type Questions

1. Explain Rh-incompatibility in humans.
2. Describe the events in cardiac cycle. Explain "double circulation".
3. Explain different types of blood groups and donor compatibility by making a table.
4. Write short note on the following
 - a. Hypertension
 - b. Coronary Artery Disease
5. In the diagrammatic presentation of heart given below, mark and label, SAN, AVN, AV bundles, bundle of His and Purkinje fibres.

