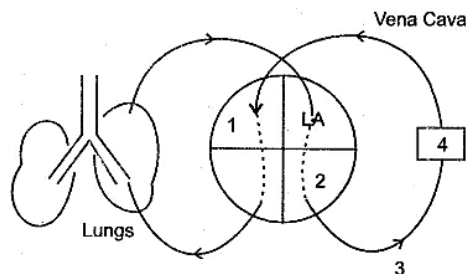


Board – ICSE**Class – 10****Topic – Circulatory System**

1. Fill in the blanks:
 - (i) The _____ is the most powerful organ in the circulatory system.
 - (ii) The foundations of physiology were laid by the physician _____.
 - (iii) The sequence of one systole followed by one diastole is termed as the _____.
 - (iv) Arteries are _____ walled and the veins are _____ walled vessels.
 - (v) The blood vessel that begins and ends in capillaries is the _____.
2. True or false. If false rewrite the wrong statement in its correct form:
 - (i) W.B.C. contains hemoglobin.
 - (ii) Serum is an immunological preparation of blood (without cells and fibrinogen) containing antibodies and antitoxins against specific diseases.
 - (iii) Leucocytes show amoeboid movement.
 - (iv) Blood group AB is universal donor.
3. State the location:
 - (i) Tonsils
 - (ii) Spleen
 - (iii) Bicuspid valve
4. State the function:
 - (i) Pulmonary vein
 - (ii) Thrombocytes
 - (iii) Bundle of His
 - (iv) Coronary artery
 - (v) Bicuspid valve
5. Multiple choice questions:
 - (i) The function of WBC is:
 - a) To distribute heat
 - b) To protect enzymes
 - c) To cause blood clotting
 - d) To destroy bacteria
 - (ii) What will happen if the spleen of a man is removed?
 - a) W.B.C. production will be lowered
 - b) Removal of dead RBC will not take place

- c) Antibody production will be decreased
 - d) R.B.C. production will be stopped
- (iii) Which protein is used in preventing clotting of blood?
- a) Albumin
 - b) Heparin
 - c) Fibrinogen
 - d) Globulin
6. Give technical terms:
- (i) Name the metallic element present in red blood cells.
 - (ii) The phase of cardiac cycle in which the auricles contract.
 - (iii) The blood vessel that supplies oxygenated blood to the liver.
 - (iv) The mineral element essential for the clotting of blood.
 - (v) The process by which leucocytes engulf and destroy bacteria.
7. Name the following:
- (i) Number of chambers present in the human heart.
 - (ii) Layer, which surrounds the heart.
 - (iii) The valve present between the left atrium and the left ventricle.
 - (iv) The blood vessel that begins and ends in capillaries.
 - (v) The number of RBCs in men.
8. Explain the terms:
- (i) Double Circulation
 - (ii) Pace maker
 - (iii) Pulse rate
9. Draw the diagrams external features of heart.
10. Given below is a schematic representation of the circulatory system in man. Study the same and answer the questions that follow:



- (i) Label the parts 1 to 4 indicated in the diagram.
- (ii) Give one difference between the parts 1 and 2 based on:
 - a) Their structure

- b) The nature of blood flowing through them.
- (iii) What is the specific name of the type of blood circulation that takes place between the heart and the lungs?
- (iv) Name the valve found at the beginning of the part labeled 3.
11. Differentiate between Arteries and Veins.
12. Differentiate between Red blood cells and White blood cells.
13. Why do people have a common belief that the heart is located on the left side of the chest? Give Reasons.
14. Describe in brief the cardiac cycle.
15. When are the sounds 'LUBB' and 'DUB' produced during heart beat?
16. Fill in the blanks:
- (i) Beside food, oxygen and waste materials, circulatory system transports _____ to various parts of the body.
- (ii) Non-coagulation of blood is called _____.
- (iii) The iron pigment _____ gives red colour to the blood.
- (iv) The three distinct types of blood vessels are _____, _____ and the _____.
- (v) The membranous covering of the heart is _____.
17. State the function:
- (i) Hemoglobin
- (ii) Vitamin K
- (iii) Pulmonary artery
- (iv) Lymph
- (v) Platelets
18. Multiple choice questions:
- i. Arteries are:
- a) Thin walled and blood flows under diminished pressure
- b) Thick walled and blood flows under high pressure
- c) Thin walled and blood flows under low pressure
- d) Thick walled and blood flows under diminished pressure
- ii. Blood pressure is measured by:
- a) Electrocardiogram (ECG)
- b) Stethoscope
- c) Sphygmomanometer

- d) Pulse rate
19. Give technical terms:
- (i) WBCs squeeze through the walls of the capillaries into the tissue.
 - (ii) The soluble protein present in blood plasma responsible for blood clotting.
 - (iii) Name an instrument which is used to hear heart sounds.
 - (iv) A fluid that transports fatty acids and glycerols.
 - (v) What is the approximate weight of heart of a man?
20. Name the following:
- (i) Name the muscles which made up the wall of the heart.
 - (ii) The blood vessel supplying blood to the kidney.
 - (iii) Oxygen is transported by the blood in the form of
 - (iv) The blood plasma from which fibrinogen has been removed.