

BOYS' HIGH SCHOOL AND COLLEGE, PRAYAGRAJ

ASSIGNMENT → 15th April – 15th May
CLASS V
SUBJECT - SCIENCE
CHAPTER 1 – THE CIRCULATORY SYSTEM

INTRODUCTION

1. The system which helps in transporting nutrients and other substances from one part of the body to the other parts of the body is known as circulatory system.
2. Circulatory system of animals consists of blood, blood vessels and heart.
3. The red colored liquid which transports nutrients and other substances to all parts of the body is known as blood. It contains erythrocytes or red blood cells which give it its red color. Blood helps in transporting food, oxygen, hormones and heat to all parts of the body.
4. Blood vessels are the tubes in which the blood flows. They are of three types- arteries, veins and blood capillaries. Arteries carry oxygenated blood that is the blood containing oxygen to all parts of the body from the heart. Veins carry deoxygenated or impure blood from all body parts to the heart. Capillaries are present at the junction of artery and vein.
5. The heart is the main pumping organ which pumps and collects blood to and from various parts of the body. It has four chambers. The blood passes two times through the heart so as to circulate once through the body so it is called double circulation

WORKSHEET-1

**Note- To be done in an interleaf note book [fair notebook]*

Part A. Answer the following Questions: -

Q1. What is circulatory system. What are the parts of the circulatory system?

A1. The system which helps in transporting nutrients and other substances from one part of the body to the other part of the body is known as circulatory system. It consists of the blood, blood vessels and heart.

Q2. What are blood vessels? Name the different types of blood vessels?

A2. Blood flows in tubes which are known as blood vessels. They can be classified as arteries, veins and capillaries.

Q3. What are any three functions of the blood?

A3. The three functions of blood are-

- a) It helps in transporting digested food from the alimentary canal to all parts of the body.
- b) It helps in transportation of oxygen for respiration.
- c) It transports heat and hence maintains constant body temperature.

Q4. Describe the location and structure of the heart?

A4) The heart is the size of a human closed fist and is located between the two lungs. It has four chambers, two auricle and two ventricles. These are labelled as right auricle, left auricle, right ventricle and left ventricle.

Q5. Why arteries have thick walls?

A5. The arteries have to distribute blood to all parts of the body hence they have thick muscular walls.

Q6. Describe the working of the heart?

A6. The working of the heart is as follows -

1. The blood rich in oxygen is poured into the left auricle from the lungs from where it is pumped into left ventricle.
2. From left ventricle it is pumped to all parts of the body.
3. The impure blood is collected and poured into right auricle from where it goes to right ventricle.
4. Right ventricle pumps it to lungs for oxygenation. This entire cycle repeats itself.

Q7. Differentiate between Arteries and Veins?

A7.

	Arteries	Veins
1.	They are deep seated and have thick walls	They are superficial and have thin walls.
2.	Arteries pump pure blood from heart to various parts of the body	Veins collect impure blood from various parts of the body to the heart.
3.	They mostly carry oxygenated blood.	They mostly carry deoxygenated blood.

Part B. Fill in the blanks: -

1. Blood helps in the transportation of hormones.
2. Right ventricle pumps blood into lungs for oxygenation.
3. The average pulse rate of human body is 72 per min.
4. The heart of a man is reddish brown in color and is four chambered.
5. Blood maintains water level of the body.

Part C. Give one word for: -

1. The thinnest blood vessels present at the junction of arteries and veins –
Capillaries
2. They collect impure blood from various parts of the body - **Vein**
3. The main pumping organ of the body - **Heart**
4. The tubes through which blood flows - **Blood Vessels**
5. The organ that oxygenates and makes the blood pure – **Lungs**

Part D. Neatly draw, color and label the following diagrams: -

1. Structure of an artery (Page No 6)
 2. Structure of a vein (Page No 7)
 3. Double circulation (Page No 9)
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WORKSHEET 2

**Note- All Exercises to be done in notebook (fair notebook)*

Part A. Define: -

1. Blood
2. Pulse
3. Double circulation

Part B. Write True or False: -

1. The broad portion of the heart is downward, and apex is upward.
2. Sparrows have the highest pulse rate.
3. Blood passes through the heart thrice during one circulation.
4. Lungs help to pump blood to all parts of the body.
5. Blood helps in removal of waste materials from our body.

Part C. Match the following: -

Column A	Column B
1. Red blood cells	A) four chambered
2. Artery	B) heartbeat
3. Heart	C) deoxygenated blood
4. Vein	D) erythrocytes
5. Pulse rate	E) oxygenated blood

Part D. Choose the right word: -

1. Elephants heart beat is _____ per minute. (40/ 25)
2. Circulatory system consists of _____ parts. (three/ four).
3. Oxygenated blood is poured into _____ (left auricle/ left ventricle).
4. The part of the heart that receives impure blood is _____ (left auricle/ right auricle)
5. _____ are deep seated blood vessels (veins/ arteries).
