

Science

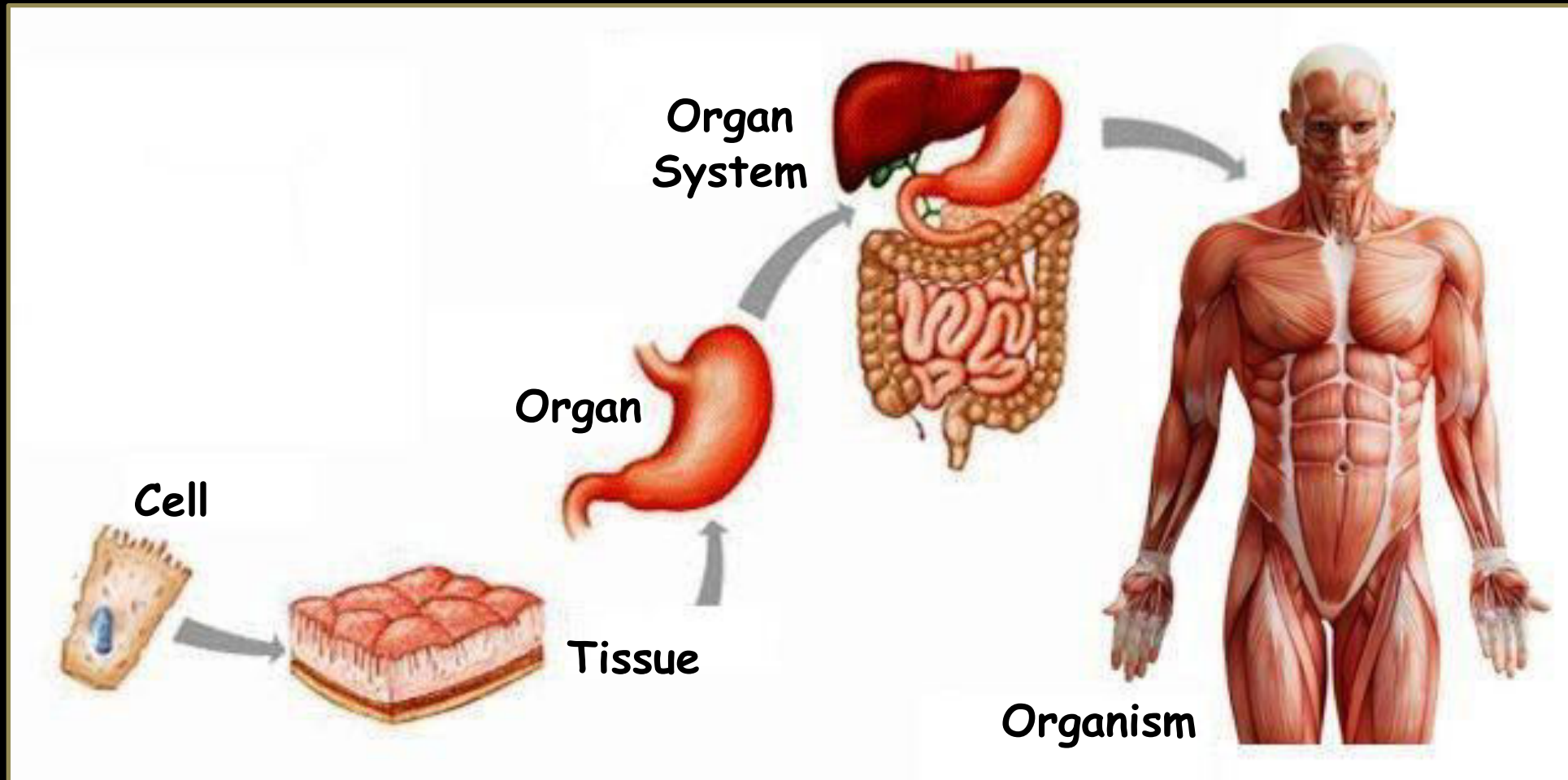
Human Circulatory System

By :-

Ms Jyotika Guleria

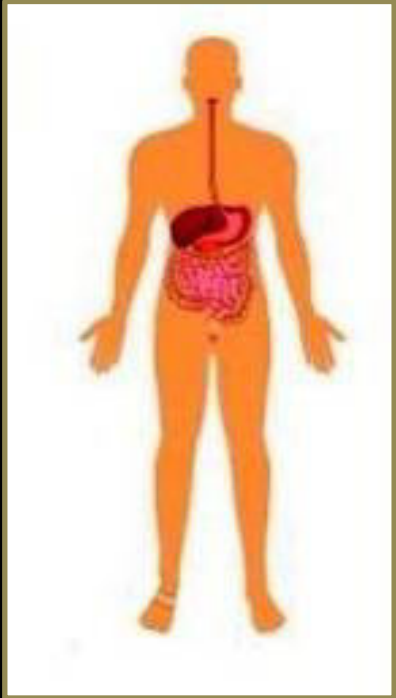
Organ Systems

Recall



Organ Systems

Recall



**Digestive
System**



**Skeletal
System**



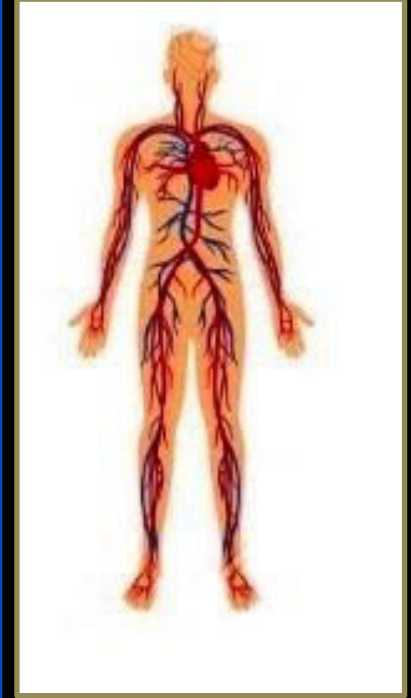
**Respiratory
System**



**Muscular
System**



**Excretory
System**



**Circulatory
System**

What will we learn ?

Circulatory System

Functions

Organs

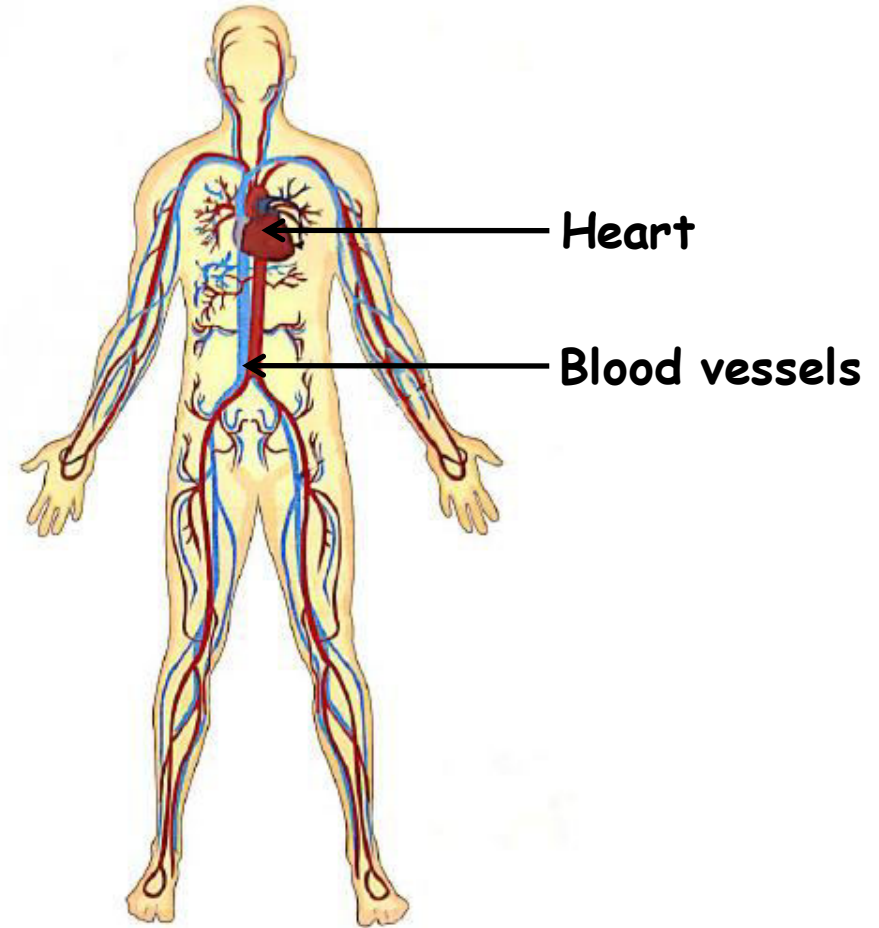
Heart

Blood
Vessels

Blood

Circulatory System

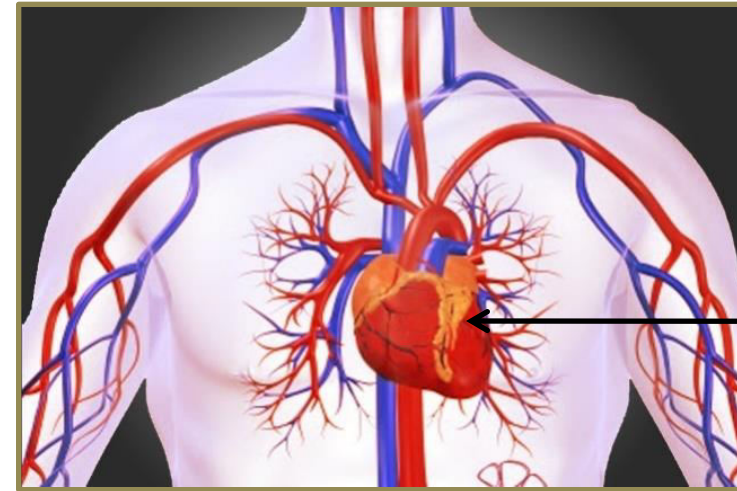
- ♦ Circulatory system transports substances inside our body.
- ♦ It consists of :-
 - ♦ Heart.
 - ♦ Network of blood vessels.
 - ♦ Blood.



Circulatory System

Heart

- ♦ It is a muscular organ that **pumps blood** into the larger blood vessels.
- ♦ It also **receives blood** from all the organs of the body.

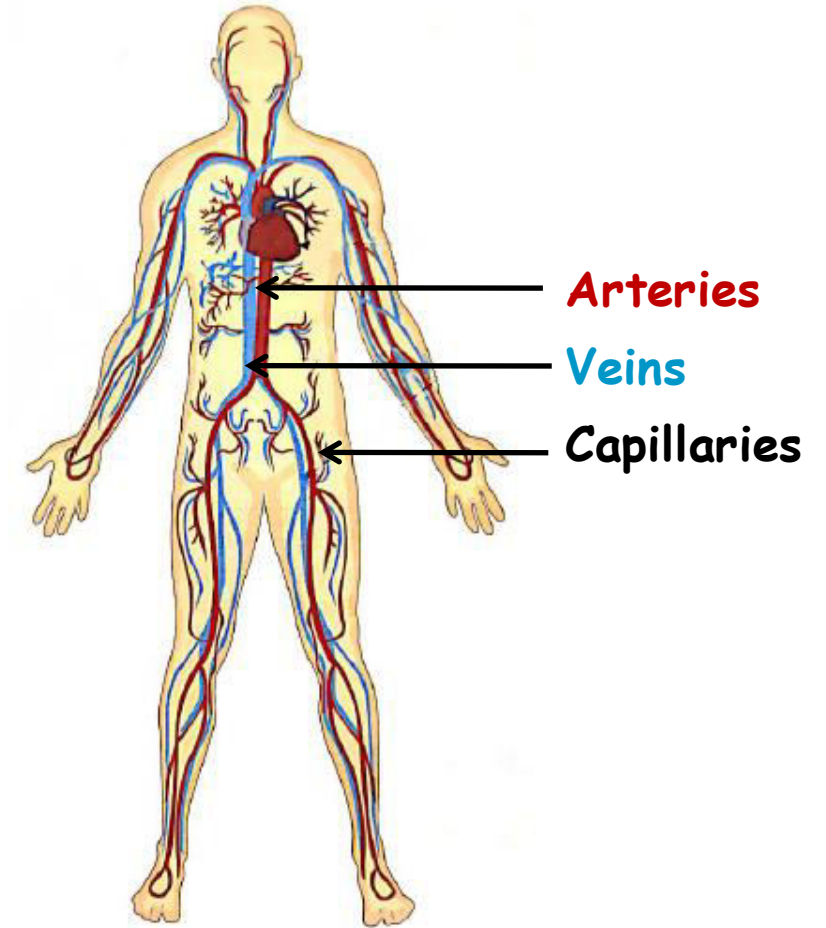


Heart

Circulatory System

Blood Vessels

- ♦ These are thin tube like structures that start from the heart and run through the entire body forming a network.
- ♦ They carry blood from the heart to all the parts of the body and from different parts of the body back to heart.
- ♦ Blood vessels are of three types:-
 - ♦ Arteries.
 - ♦ Veins.
 - ♦ Capillaries.



Circulatory System

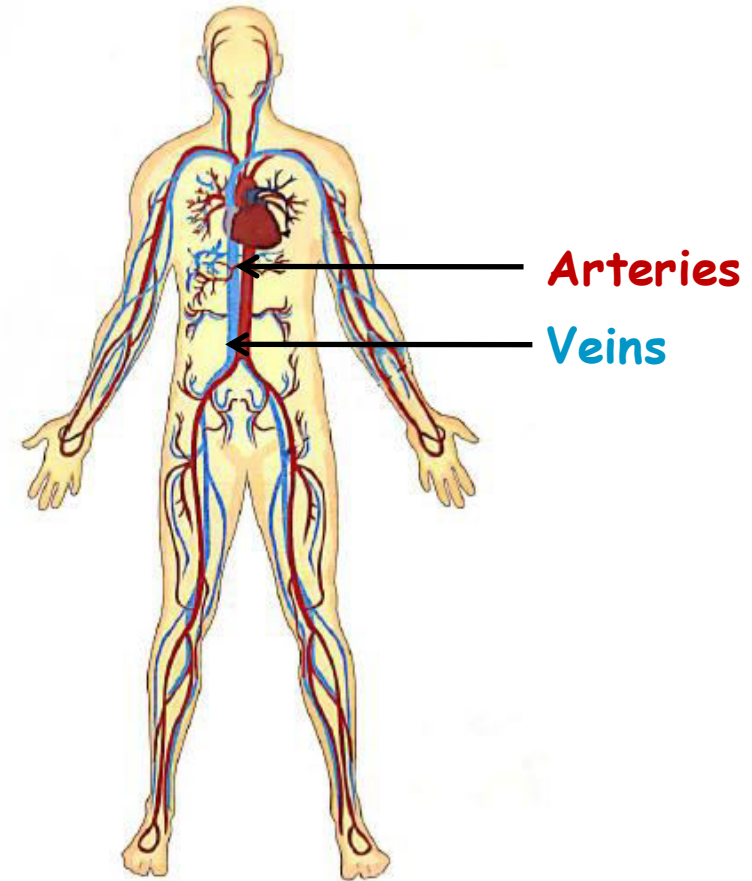
Blood Vessels

Arteries

- ♦ Carry blood from heart to different parts of the body.

Veins

- ♦ Carry blood from different parts of the body to the heart.

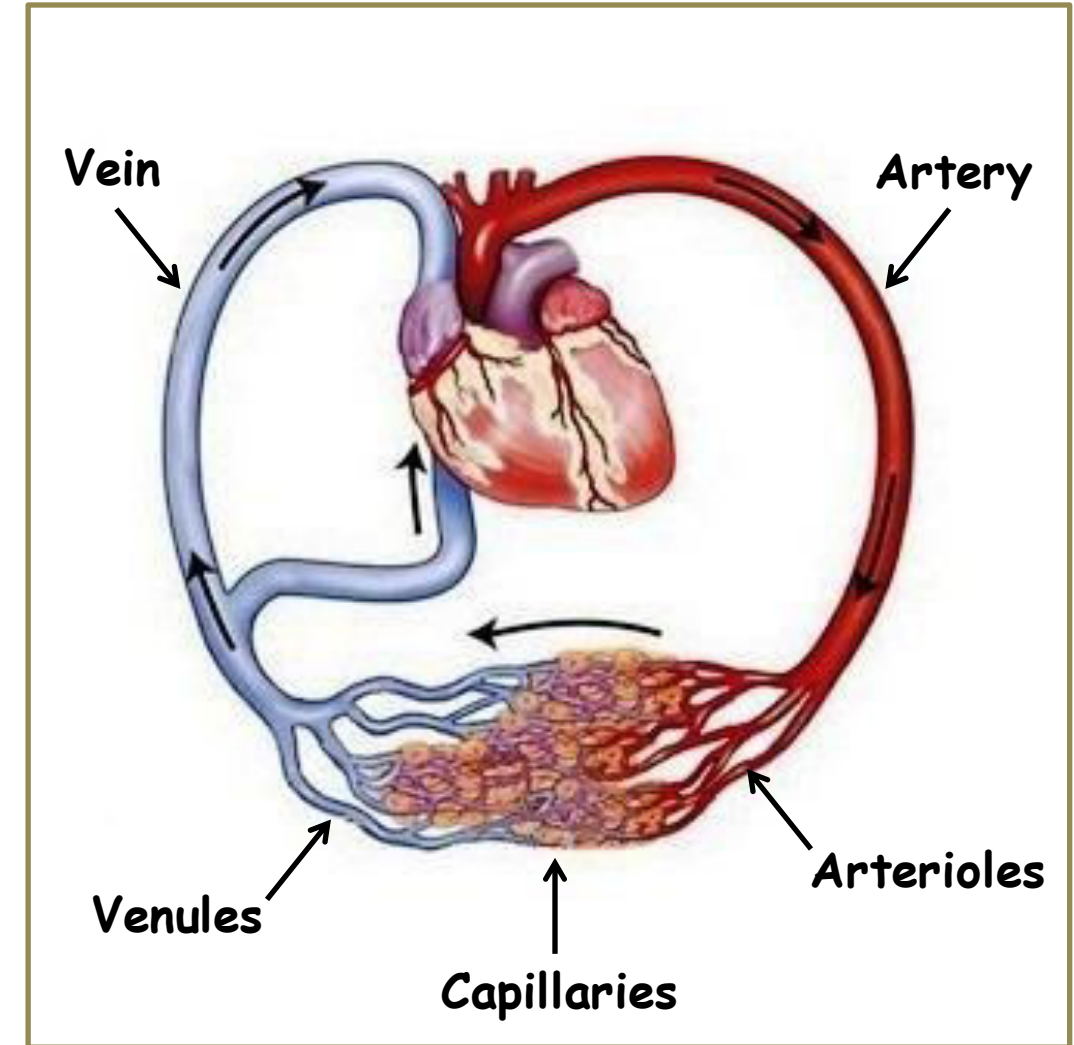


Circulatory System

Blood Vessels

Arterioles, Venules, Capillaries

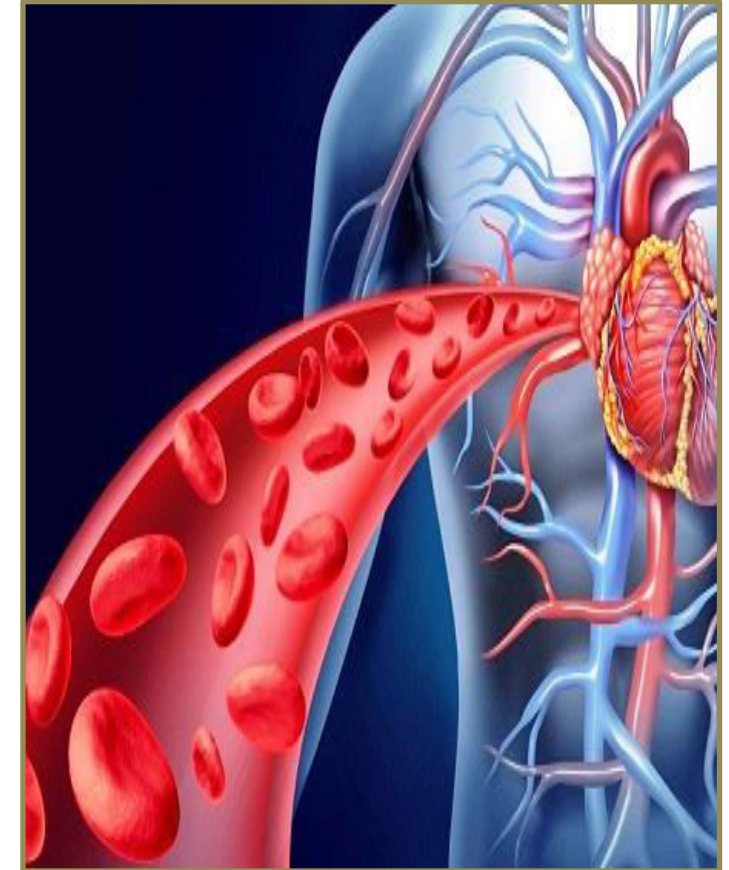
- ✦ Arteries branch out into smaller and thinner blood vessels called **arterioles**.
- ✦ Veins branch out into smaller and thinner blood vessels called **venules**.
- ✦ These arterioles and venules further branch into even smaller blood vessels called **Capillaries**.
- ✦ Capillaries help in exchange of gases, water and nutrients between the blood and the tissues.



Circulatory System

Blood

- ♦ It is a **red coloured fluid** that flows through the blood vessels from the heart to all the parts of the body and then back to the heart.
- ♦ It **transports nutrients, oxygen and water** inside the body.
- ♦ It also **transports the waste products like carbon dioxide** produced in the body to the excretory organ like **lungs** so that they can be removed from the body.



Think and Answer

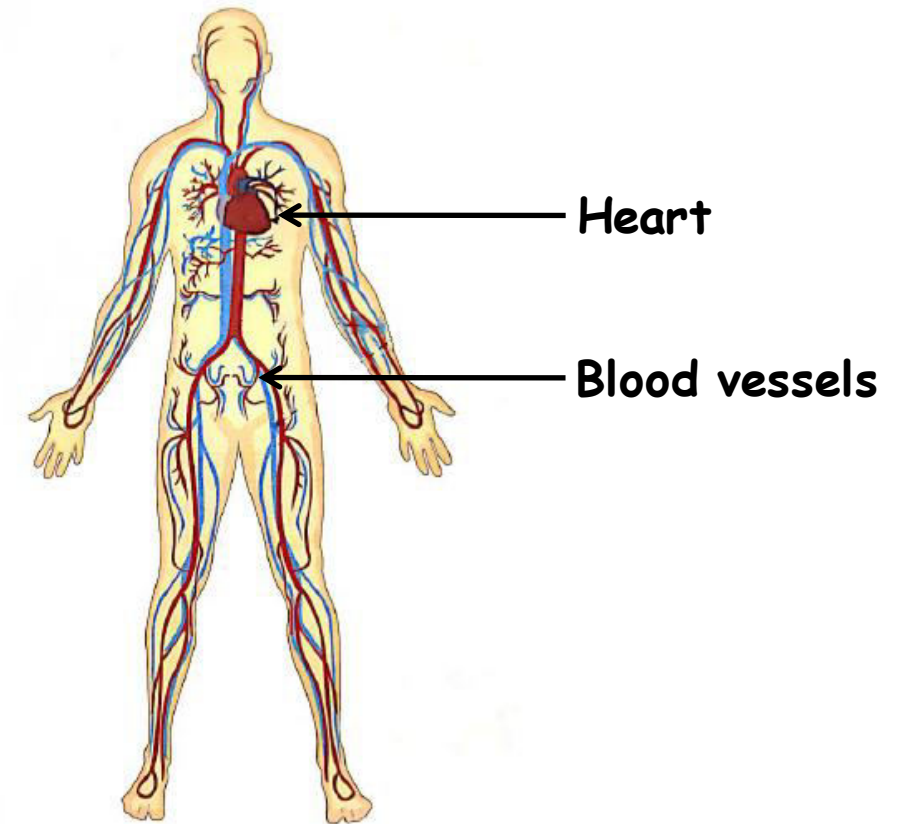
Q: What are the functions of Circulatory system? What are its organs?

✦ Key points to be covered in the answer:-

◆ Transports substances

✦ Consists of :-

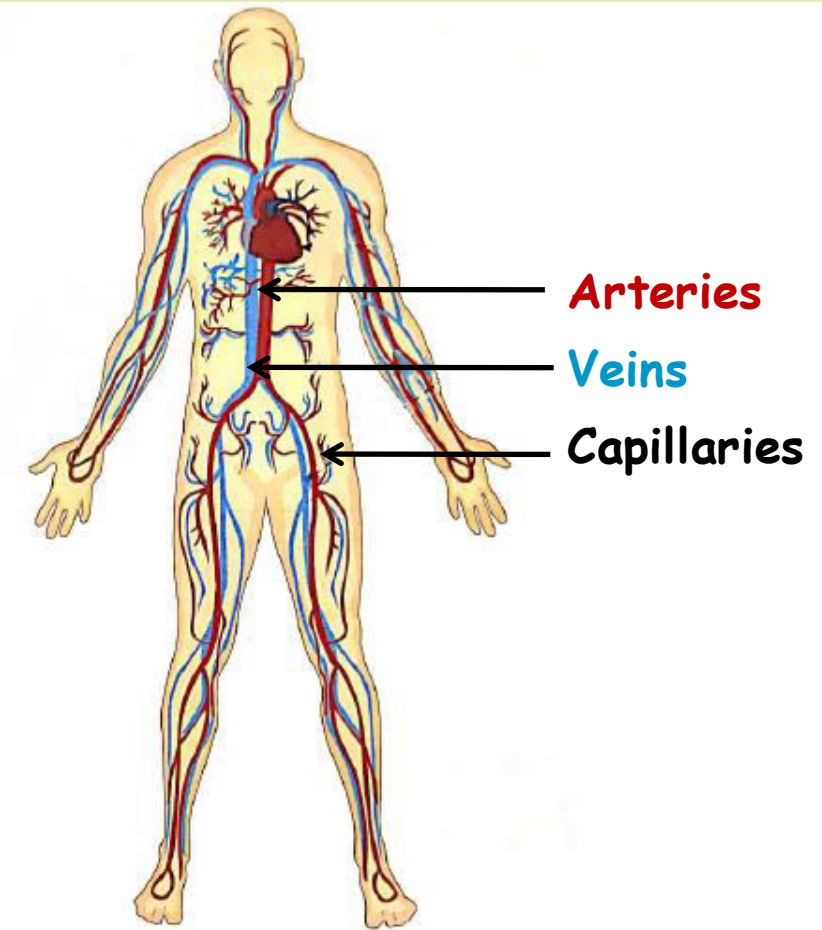
- ◆ Heart.
- ◆ Network of blood vessels.
- ◆ Blood.



Think and Answer

Q: Write a short note on blood vessels.

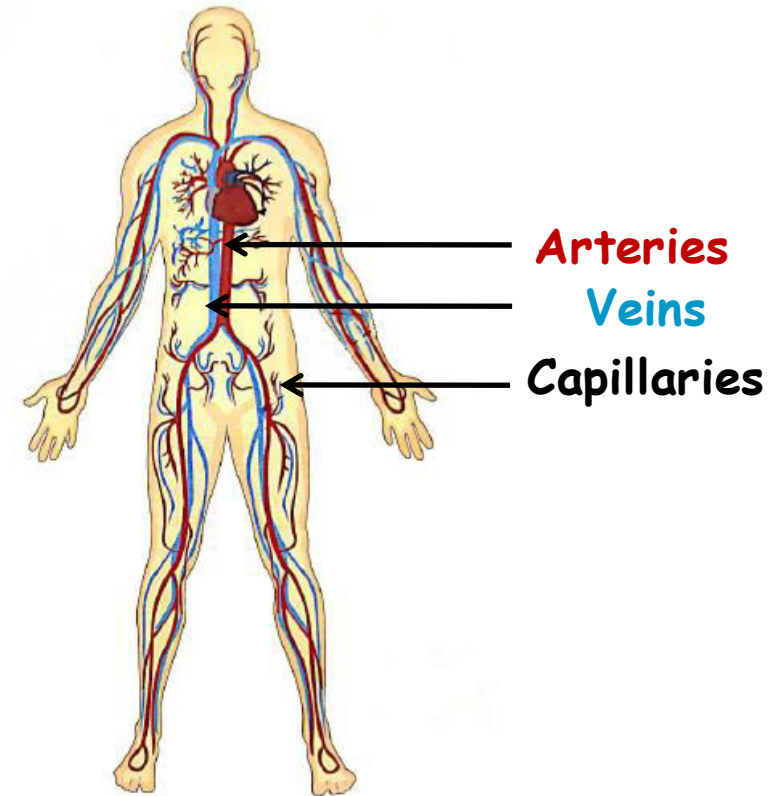
- ♦ Key points to be covered in the answer:-
 - ♦ thin tube like structures that start from the heart and run through the entire body forming a network.
 - ♦ carry blood from the heart to all the parts of the body and from different parts of the body back to heart.
 - ♦ Blood vessels are of three types:-
 - ♦ Arteries.
 - ♦ Veins.
 - ♦ Capillaries.



Think and Answer

Q: Write a short note on blood.

- ♦ Key points to be covered in the answer:-
 - ♦ Red coloured fluid that flows through the blood vessels from the heart to all the parts of the body and then back to the heart.
 - ♦ Transports nutrients, oxygen, carbon dioxide and water inside the body.
 - ♦ Also transports the waste product like carbon di-oxide produced in the body to the excretory organ like lungs so that they can be removed from the body.



Think and Answer

Q: Differentiate between arteries and veins .

Artery

1. Arteries carry blood rich in oxygen.
2. Arteries carry blood from heart to all parts of the body.

Vein

1. Veins carry blood rich in carbon di-oxide
2. Veins bring blood from all parts of body back to the heart.

Revise and Recall

Who am I?

1. I am a muscular organ that pumps blood.

Heart

2. I carry blood from the heart to all parts of the body and then back to heart.

Blood Vessels

3. I am the smallest blood vessel.

Capillary

4. I am a blood vessel that carries blood from the heart to all parts of the body.

Artery

5. I am a blood vessel that carries blood from all parts of the body back to heart.

Vein

6. I flow through the blood vessels.

Blood

