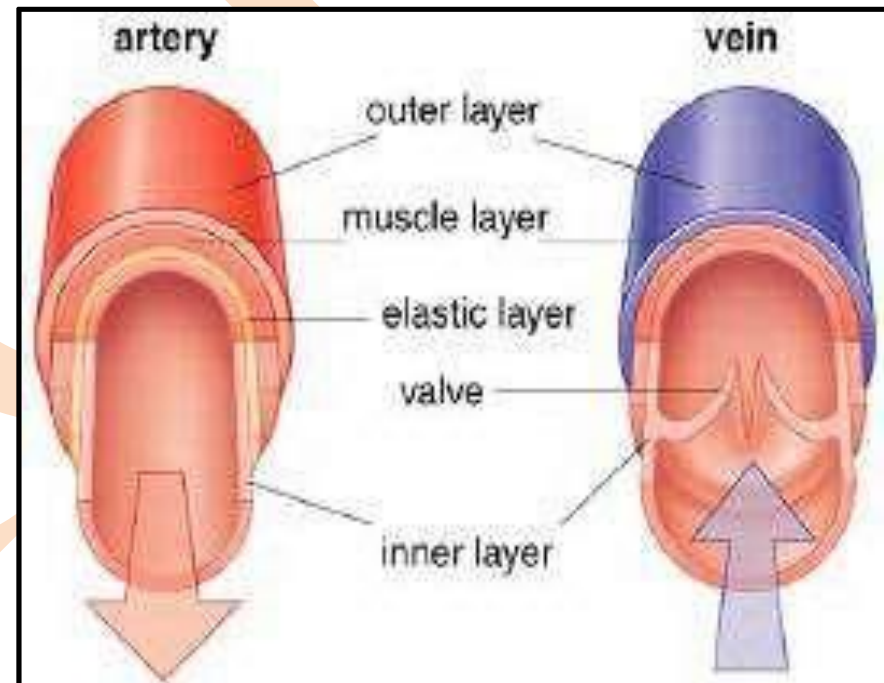


HUMAN ANATOMY AND PHYSIOLOGY-I, BP-101(T)**UNIT-V (Cardiovascular system)****CLASS:3****TOPIC – STRUCTURE AND FUNCTIONS OF VEINS AND CAPILLARIES****Structure of arteries & veins**

Arteries & veins are made of the 3 layer:

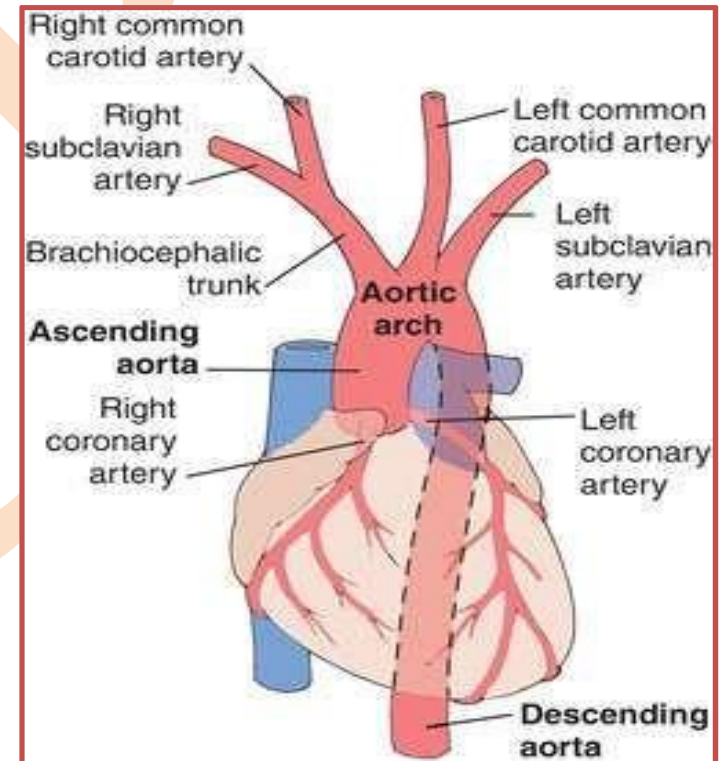
- Tunica adventitia-outer fibrous layer
- Tunica media-middle muscle layer
- Tunica intima-inner serous layer



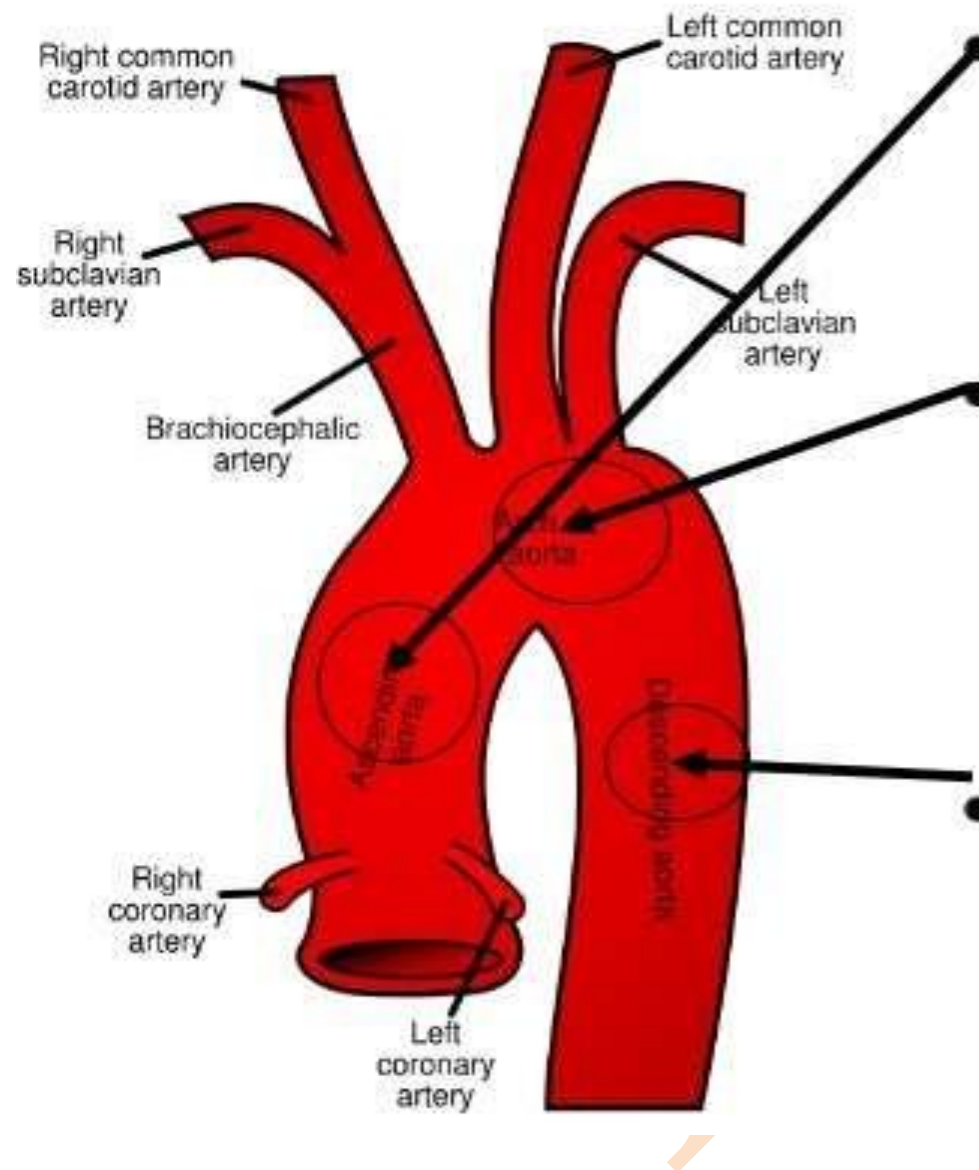
The Arteries

Aorta is the main artery in the body. It arises from the left ventricle. Aorta consists of 3 parts:

- Ascending aorta
- Arch of aorta
- Descending aorta.



Ascending aorta, Arch of aorta, Descending aorta



Ascending Aorta

— the section between the heart and the arch of aorta

Arch of Aorta — the peak part that looks somewhat like an inverted "U"

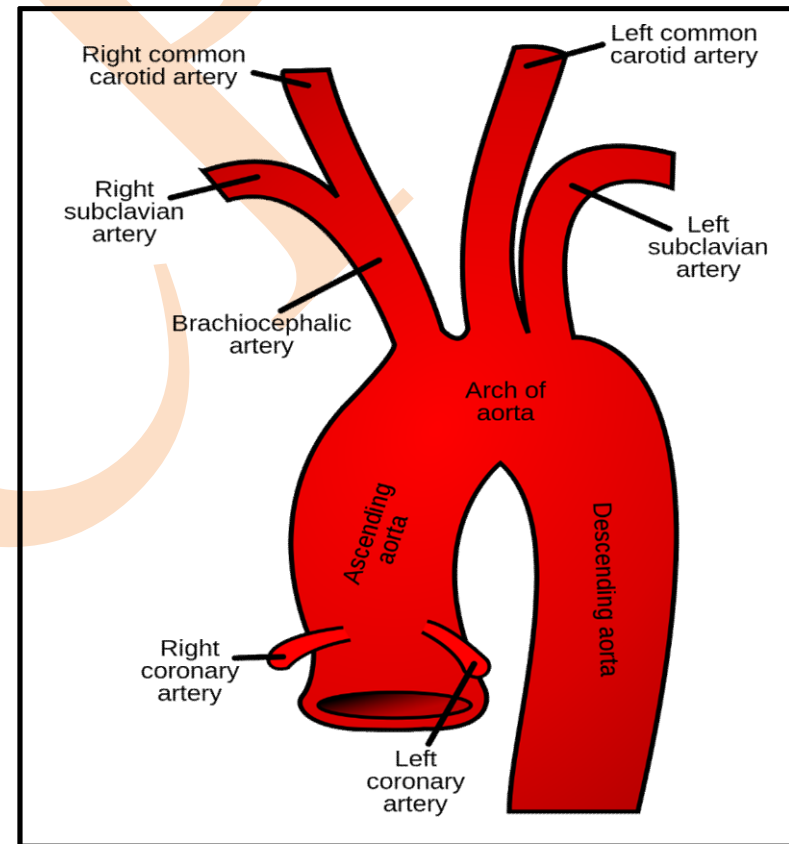
• **Descending Aorta** — the section from the arch of aorta to the point where it divides into the common iliac arteries

Function of arteries

Ascending aorta: It supply blood to heart itself.

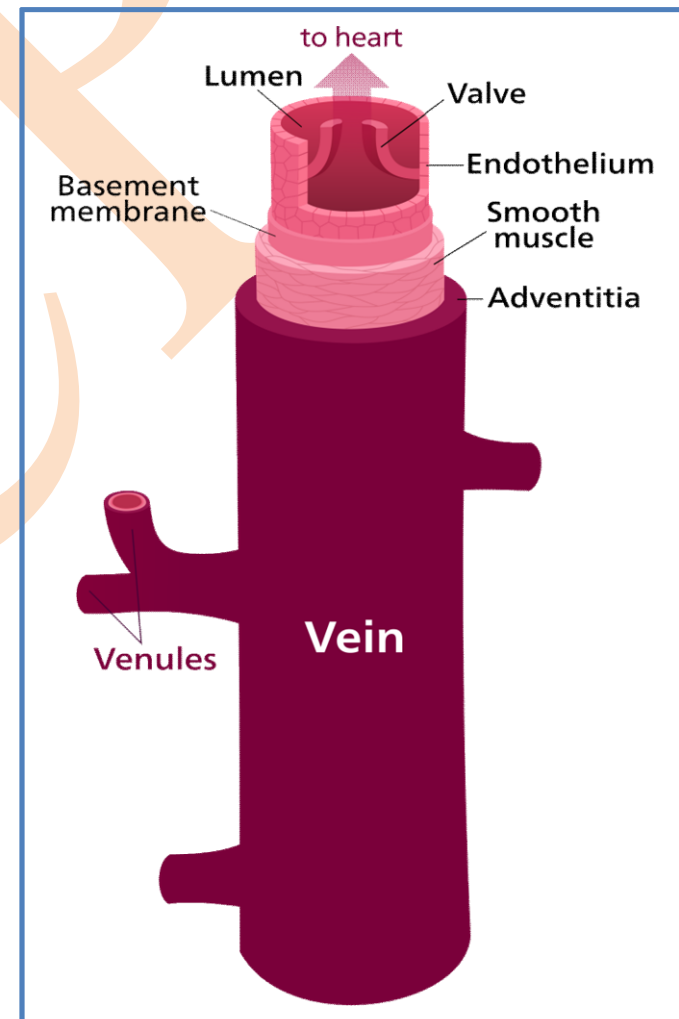
Arch of aorta: It supplies blood to head, neck and upper limbs.

Descending aorta: It supplies blood to the body wall of chest and abdominal cavity and its viscera.

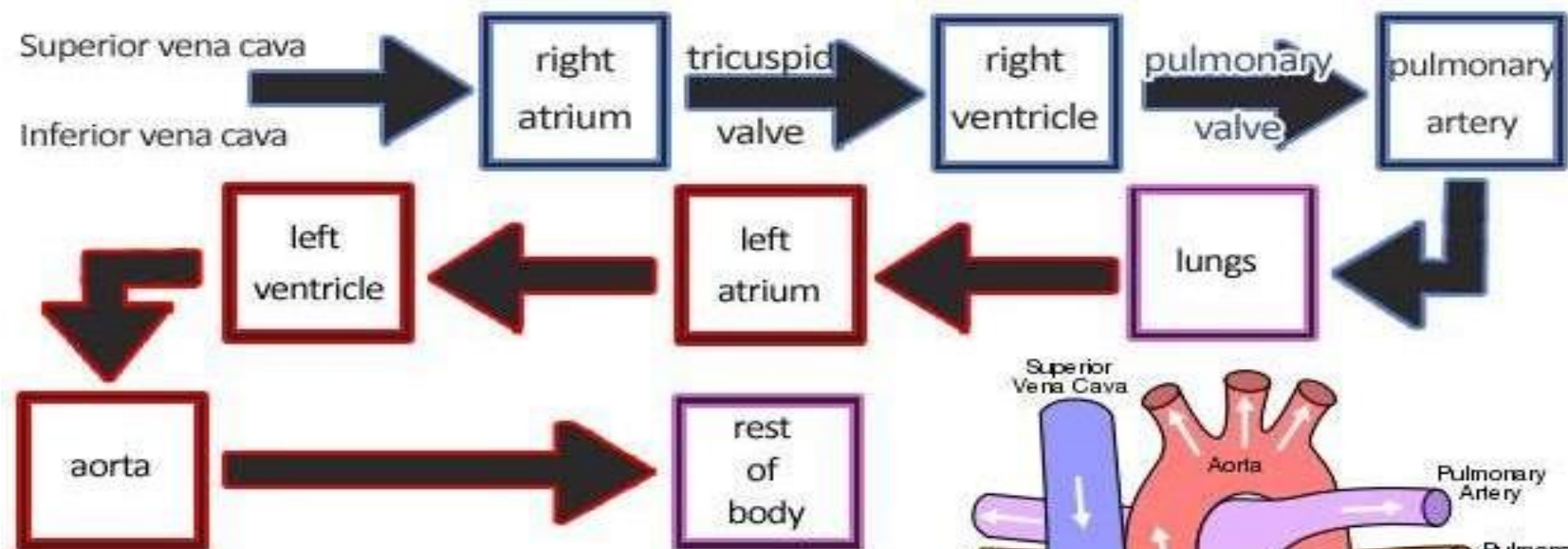


Function of veins

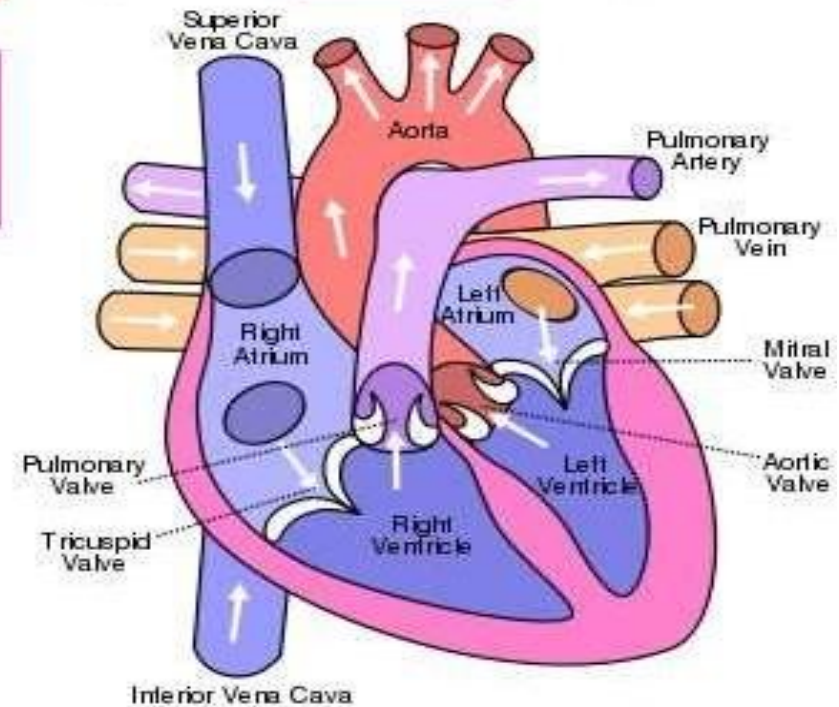
- ❖ They are responsible for returning deoxygenated blood back to the heart after arteries carry blood out.
- ❖ The vena cava is the largest **vein** in the body.
- ❖ **Veins** have much thinner walls than arteries.



Blood circulation



Circulation of Blood Through the Heart:



Function of Heart

- The human heart is an organ that pumps blood through the body via the circulatory system
- It supplying oxygen and nutrients to the tissues and removing carbon dioxide and other wastes



IMPORTANT QUESTIONS:

2M QUESTIONS:

- 1) Define Heart and its functions.
- 2) Define ECG.
- 3) Define Cardiac Output.

5M QUESTIONS:

- 1) Explain the physiology and anatomy of heart.
- 2) Explain in details about blood circulation of heart with the help of diagram and conduction system of heart

10M QUESTIONS:

- 1) Explain the physiology and anatomy of heart.
- 2) Explain in details about blood circulation of heart with the help of diagram and conduction system of heart