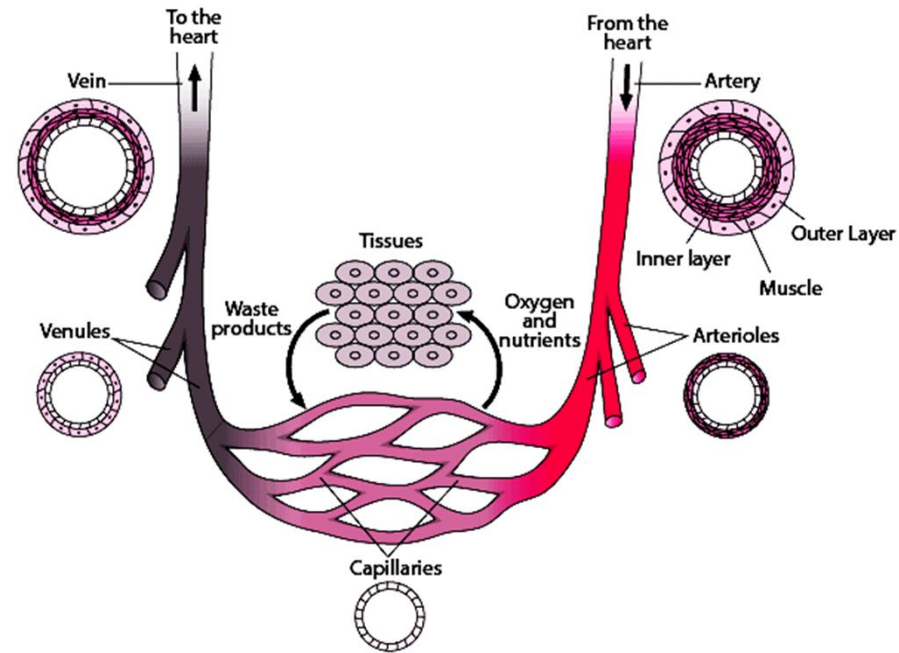


CASE STUDY QUESTION 34

Read the following and answer any four questions from (i) to (v)

The tubes – blood vessels - Arteries are the vessels which carry blood away from the heart to various organs of the body. Since the blood emerges from the heart under high pressure, the arteries have thick, elastic walls. Veins collect the blood from different organs and bring it back to the heart. They do not need thick walls because the blood is no longer under pressure, instead they have valves that ensure that the blood flows only in one direction. On reaching an organ or tissue, the artery divides into smaller and smaller vessels to bring the blood in contact with all the individual cells. The smallest vessels have walls which are one-cell thick and are called capillaries. Exchange of material between the blood and surrounding cells takes place across this thin wall. The capillaries then join together to form veins that convey the blood away from the organ or tissue.



(i) A blood vessel which carries blood back to the heart is :

(a) artery

(b) vein

(c) capillary

(d) platelet

Ans: (b) vein

(ii) The blood vessel which carries oxygenated blood from the lungs to the heart is :

(a) main artery

(b) pulmonary artery

(c) main vein

(d) pulmonary vein

Ans: (d) pulmonary vein

(iii) The smaller vessels in which arteries are divided after entering the body organs are called

- (a) cytokinesis
- (b) granum
- (c) centrioles
- (d) arterioles

Ans: (d) arterioles

(iv) After entering into the tissues, the arteries are divided into

- (a) aorta
- (b) atrium
- (c) capillaries
- (d) veins

Ans: (c) capillaries

(v) The blood vessels in which there are no valves includes

(a) veins and capillaries

(b) capillaries and arteries

(c) arteries and nerves

(d) veins and arteries

Ans: (b) capillaries and arteries