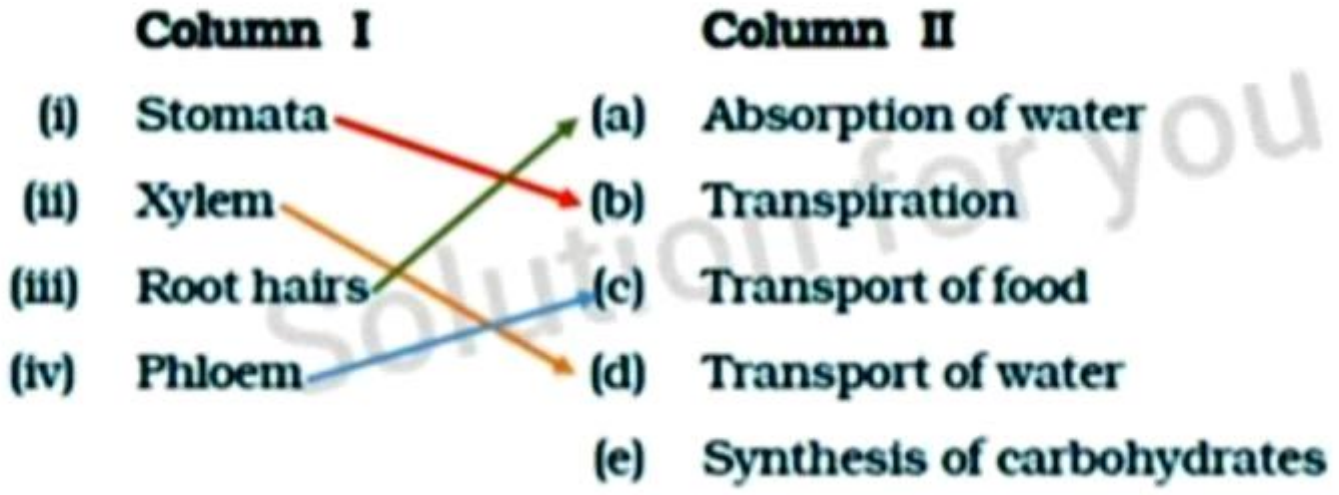
1. Match structures given in Column I with functions given in Column II.



Q2. Fill in the blanks.

(i). The blood from the heart is transported to all parts of the body by the arteries.
(ii). Hemoglobin is present in red blood cells.
(iii). Arteries and veins are joined by a network of capillaries.
(iv). The rhythmic expansion and contraction of the heart is called heart beat.
(v). The main excretory product in human beings is urea.
(vi). Sweat contains water and salts.
(vii). Kidneys eliminate the waste materials in the liquid form called urine.
(viii). Water reaches great heights in the trees because of suction pull caused by transpiration.

3. Choose the correct options:

(a) In plants, water is transported through

(i) Xylem **(ii) Phloem**

(iii) Stomata **(iv) Root hair**

✓ **Answer:- (a) (i) xylem**

(b) Water absorption through roots can be increased by keeping the plants

(i) in the shade **(ii) in dim light**

(iii) under the fan **(iv) covered with a polythene bag**

✓ **Answer:- (b) (iii) under the fan**

Q4. Why is transport of materials necessary in a plant or in an animal? Explain.

Answer:-

(i) Transport of materials in a plant or in a animal is necessary for carrying out metabolic activities.
(ii) Transportation of materials help in the supply of nutrients and energy to each every parts of animals and plants need energy which they get from the transported materials.
(iii) Also, the waste materials produced during metabolic activities are toxic and hence need to be removed from the body by transportation.

Q5. What will happen if there are no platelets in the blood?

Answer:-

If there are no platelets in the blood, then the blood would not be able to clot. A clot is formed because of platelets. They release blood clotting chemicals at the site of injury. These chemicals form a clot and prevent further bleeding.

Q6. What are stomata? Give two functions of stomata.

Answer:-

Tiny pores present on the leaf surface are known as stomata.

Functions of stomata :-

- Helps in exchange of gases
- Evaporation of water through leaves occurs due to stomata.

Q7. Does transpiration serve any useful function in the plants? Explain.

Answer:-

Due to transpiration, a suction pressure develops which help in transpiration of water.

Q8. What are the components of blood?

Answer:-

The main components of blood are plasma, red blood cells, white blood cells, and platelets.

Q9. Why is blood needed by all the parts of a body?

Answer:-

The blood that circulates in the body distributes food and oxygen to different cells of the body. It also carries waste products from different parts of the body for excretion.

Q10. What makes the blood look red?

Answer:-

Hemoglobin, a red pigment present in the blood makes it look red.

Q11. Describe the function of the heart.

Answer:-

The right auricle and ventricle receive blood with carbon dioxide from all parts of the body. The collected blood is then pumped to the lungs for the purification. In lungs, the exchange of gases takes place and purified blood is sent back to left auricle. It pumps it to the left ventricle, which in turn pumps off the purified blood to all parts of body through arteries

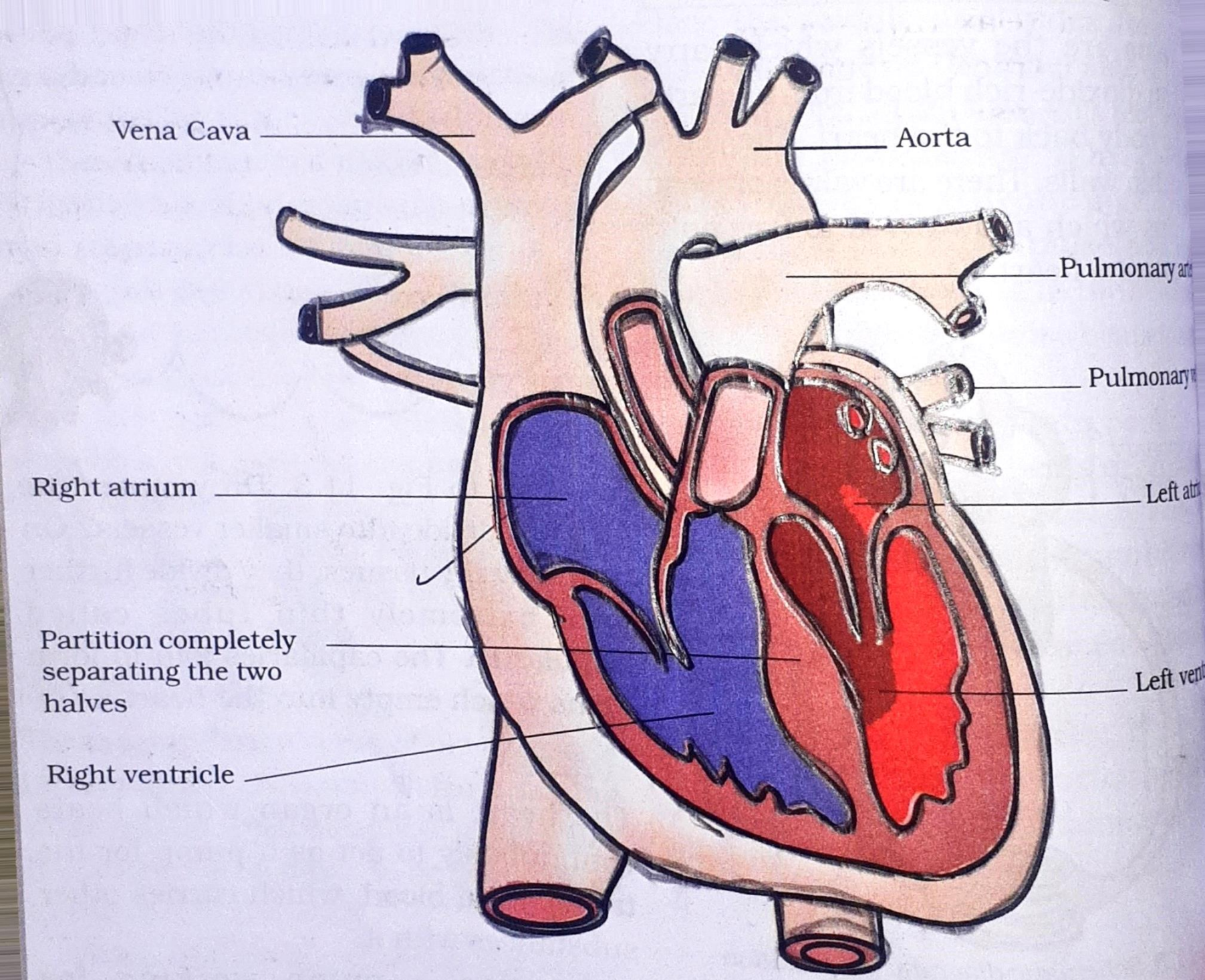
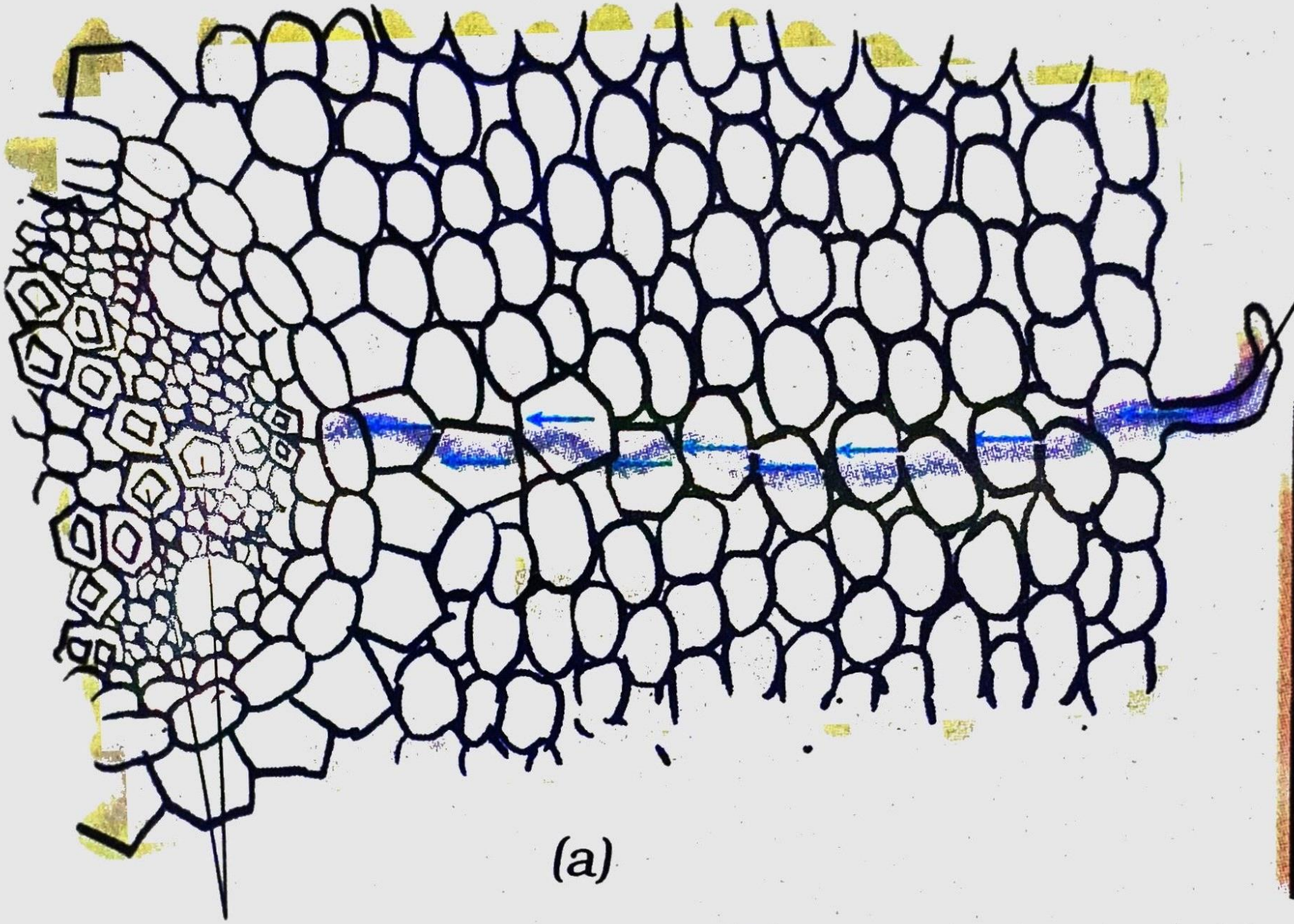


Fig. 11.4 Sections of human heart

Q12. Why is it necessary to excrete waste products?

Answer:-

All cells of our body produce waste products. These waste products are toxic to the body and therefore need to be excreted out. This process of removing waste products produced in the cells of living organisms is called excretion.



(a)

Xylem vessels

Fig. 11.7 *Transport*
(a) a section

***Fig. 11.6** Human excretory system*