



## INDIAN SCHOOL AL WADI AL KABIR



<b>Class: VII</b>	<b>Department: SCIENCE-2023-2024</b>	<b>Date – 14-12-2023</b>
<b>TEXTBOOK- Q &amp;A</b>	<b>Topic: TRANSPORTATION IN ANIMALS AND PLANTS</b>	<b>Note: A4 FILE FORMAT</b>
<b>Name of the student:</b>	<b>Class &amp; Section:</b>	<b>Roll no.</b>

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

Column- I	Column-II
(i) Stomata	(a) Absorption of water
(ii) Xylem	(b) Transpiration
(iii) Root hairs	(c) Transport of food
(iv) Phloem	(d) Transport of water
	(e) Synthesis of carbohydrates

**Solution:**

Column- I	Column-II
<b>(i) Stomata</b>	<b>(b) Transpiration</b>
<b>(ii) Xylem</b>	<b>(d) Transport of water</b>
<b>(iii) Root hairs</b>	<b>(a) Absorption of water</b>
<b>(iv) Phloem</b>	<b>(c) Transport of food</b>

2. Fill in the blanks.

- The blood from the heart is transported to all parts of the body by the\_\_\_\_\_.
- Haemoglobin is present in\_\_\_\_\_ cells.
- Arteries and veins are joined by a network of \_\_\_\_\_.
- The rhythmic expansion and contraction of the heart is called\_\_\_\_\_.
- The main excretory product in human beings is \_\_\_\_\_.
- Sweat contains water and \_\_\_\_\_.
- Kidneys eliminate the waste materials in the liquid form called \_\_\_\_\_.
- Water reaches great heights in the trees because of suction pull caused by\_\_\_\_\_.

**Solution:**

- (i) The blood from the heart is transported to all parts of the body by the **arteries**.
- (ii) Haemoglobin 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 **heartbeat**.
- (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 option:**

(a) In plants, water is transported through

**(i) Xylem**

(ii) Phloem

(iii) Stomata

(iv) Root hair

(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

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

**Ans. Transport of materials is necessary in a plant or an animal for the following reasons:**

- **To transport food to various parts of the body**
- **Animals need to transport wastes to parts from where they can be removed.**

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

**Ans. If there are no platelets, then blood will not clot as platelets release blood clotting factor at the site of injury.**

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

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

**Functions of stomata**

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

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

**Ans. Transpiration serves the following function in plants**

- **It helps in lowering the temperature of plants, thus preventing heat injury to plants.**
- **Helps in transpiration pull, which helps in raining water on higher plants.**
- **It also causes loss of water absorbed by plants.**

8. What are the components of blood?

**Ans. Red blood cells, white blood cells, platelets and plasma.**

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

**Ans. Blood is a significant part of the transport system in our body, and we need blood for the following reasons:**

- *Circulation of inhaled oxygen for the oxidation of food.*
- *Transportation of nutrients to the different parts of the body.*
- *Removal of waste products produced during digestion.*
- *Elimination of carbon dioxide produced during respiration.*

10. What makes the blood look red?

**Ans. Haemoglobin, a red pigment present in the blood makes it look red.**

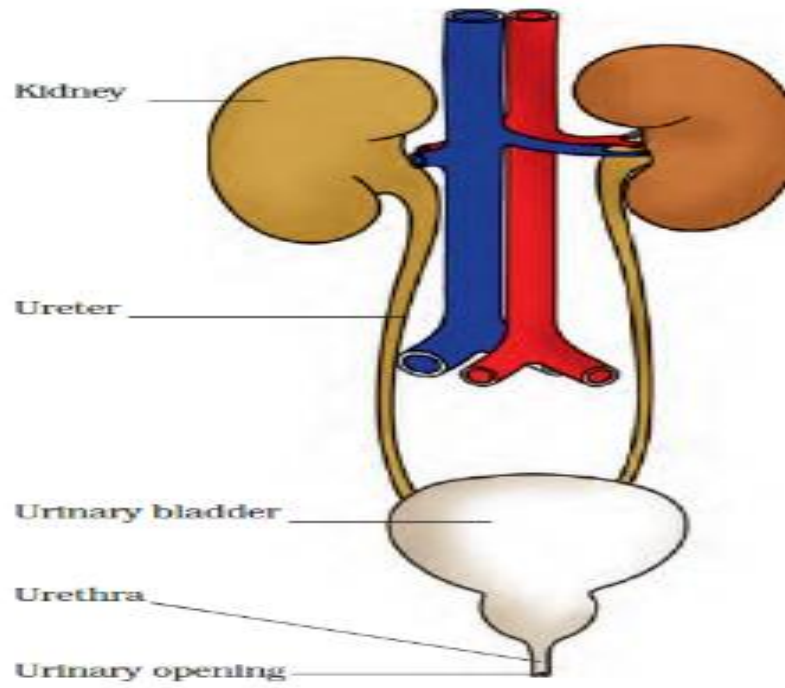
11. Describe the function of the heart.

**Ans. The right auricle and ventricle receive blood rich in carbon dioxide from all parts of the body through the vena cava. The collected blood is then pumped to the lungs for the purification through pulmonary artery. In the lungs, the exchange of gases takes place and purified blood is sent back to the left auricle through the pulmonary vein. It pumps it to the left ventricle, which in turn pumps off the purified blood to all parts of the body through the aorta.**

12. Why is it necessary to excrete waste products?

**Ans. When our cells perform their functions, certain waste products are released. These are toxic and hence need to be removed from the body.**

13. Draw a diagram of the human excretory system and label the various parts.



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