

NCERT SOLUTIONS- TRANSPORTATION IN ANIMALS AND PLANTS

NCERT Solutions for Class 7 Science Chapter 11 Transportation in Animals and Plants is the essential study material to perfect Transportation in Animals and Plants topics. The NCERT Class 7 Science solutions provided here correctly answer NCERT textbook questions. Solutions curated comprehensively will help students understand the subtopics in this chapter in a better way.

IMPORTANT SUB-TOPICS MENTIONED IN THE NCERT CLASS 7 SCIENCE CHAPTER 11 TRANSPORTATION IN ANIMALS AND PLANTS:

NCERT Solutions for Class 7 Science Chapter 11 Transportation in Animals and Plants has the following sub-topics as given below:

Sr. no	Topics
1.	Circulatory System
2.	The Excretory System in Animals
3.	The Transportation System in Plants

NCERT SOLUTIONS CLASS 7 SCIENCE CHAPTER 11 TRANSPORTATION IN ANIMALS AND PLANTS:

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

ANS-

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

2. Fill in the blanks.

(i) The blood from the heart is transported to all parts of the body by the _____.

(ii) Haemoglobin is present in _____ cells.

(iii) Arteries and veins are joined by a network of _____.

(iv) The rhythmic expansion and contraction of the heart is called the _____.

(v) The main excretory product in human beings is _____.

(vi) Sweat contains water and _____.

(vii) Kidneys eliminate the waste materials in the liquid form called _____.

(viii) Water reaches great heights in the trees because of suction pull caused by _____.

ANS- (i) arteries

(ii) red blood

(iii) capillaries

(iv) heartbeat

(v) urea

(vi) salts

(vii) urine

(viii) 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

ANS-

a. i) xylem

b. iii) under the fan

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

ANS- Both plants and animals require the transportation of materials because each cell needs a consistent supply of nutrients and oxygen to release energy through respiration.

To be absorbed by cells, the food we eat must first be broken down into smaller components. All of the body's cells need to get the oxygen we breathe in. Additionally, our bodies need to continuously eliminate waste products like carbon dioxide.

Our body has a specialised transport system for moving all these substances (nutrients, oxygen, and waste products).

Similar to animals, plants use their vascular tissues (called xylem and phloem) to transport food and water.

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

ANS- Because platelets produce blood clotting factors at the site of damage and stop additional bleeding, blood won't clot if there aren't any platelets present.

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

ANS- Stomata are the tiny pores that exist on the surface of leaves.

Functions of stomata

- It helps in the gaseous exchange.
- Stomata allow water to evaporate through leaves.

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

ANS- The following are the purposes of transpiration in plants.

- It helps in reducing plant temperatures, protecting plants from heat damage.
- It helps in transpiration, helping in making rainfall on higher plants.
- It also results in the loss of water taken up by plants.

8. What are the components of blood?

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

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

ANS- The following are some of the reasons why our bodies need blood, which is a vital component of the transport system in our bodies:

- for the delivery of oxygen to each and every region of our body
- to get rid of carbon dioxide in our bodies
- to transfer heat and assist in controlling body temperature.
- To combat illnesses and infections, it is necessary.

10. What makes the blood look red?

ANS- The presence of a red pigment called haemoglobin in red blood cells (RBC) makes the blood appear red.

11. Describe the function of the heart.

ANS- The heart is an organ which beats continuously to act as a pump for the transport of blood, which carries other substances with it. The heart has four chambers. The two upper chambers are called the atria (singular: atrium) and the two lower chambers are called the ventricles. The wall separating the chambers prevents the mixing of blood with high oxygen and blood with high carbon dioxide concentrations. The heart pumps blood to the rest of the body as it travels from the lungs to the heart and back again.

12. Why is it necessary to excrete waste products?

ANS- A few waste products are discharged by the body's cells as they perform their functions. These must be eliminated from the body since they are harmful.

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

ANS-

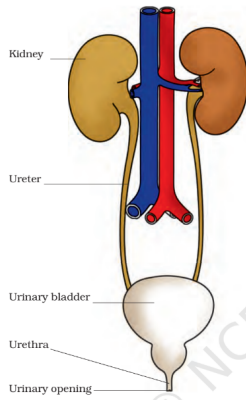


Fig. 11.6 Human excretory system

THOUGHTCHAKRA