TRANSPORTATION IN ANIMALS AND PLANTS

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

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

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 _____.

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 _____.

A. i) arteries ii) red blood iii) capillaries iv) heart beat
v) urea vi) salts vii) urine
viii) transpiration

3. Choose the correct options :

a) In plants, water is transported through (i)

i) Xylem ii) Phloem iii) Stomata iv) Root hair

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

i) in the shade ii) in dim light
iii) under the fan iv) covered with a polythene bag

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

A. i) Transport of materials is necessary in both plants and animals as every cell needs a regular supply of nutrients and oxygen for releasing energy through respiration.

ii) It is also necessary for the removal of waste materials from the body.

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

A. If there are no platelets in the blood, the blood will not clot in case of any injury.

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

A. The tiny pores present on the surface of the leaves are called stomata.

Functions of stomata:

i) Stomata help in the exchange of gases.

ii) Evaporation of water from the leaf surface occurs through stomata.

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

A. i) Transpiration generates a suction pull (the same that you produce when you suck water through a straw) which can pull water to great heights in the tall trees.

ii) Transpiration also cools the plant.

8. What are the components of blood?

A. **The main components of blood are:**

a) Plasma b) Corpuscles (or) Cells

Corpuscles are of three types.

i) Red Blood Cells (RBC) Or Erythrocytes.

ii) White Blood cells (WBC) Or Leucocytes.

iii) Platelets or Thrombocytes.

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

A. **Blood is needed by all parts of the body for the:**

i) transportation of the food materials.

ii) transportation of oxygen from the lungs to different cells of the body.

iii) transportation of waste materials to the organs of excretion.

10. What makes the blood look red?

A. Haemoglobin present in the RBC of blood makes the blood look red.

11. Describe the function of the heart.

A. i) The heart is an organ which beats continuously to act as a pump for the transport of blood and also carry other substances.

ii) The walls of the chambers of the heart are made up of muscles. These muscles contract and relax rhythmically.

iii) This rhythmic contraction followed by its relaxation constitute a heartbeat.

iv) The rhythmic beating of the various chambers of the heart maintain circulation of blood and transport of substances to different parts of the body.

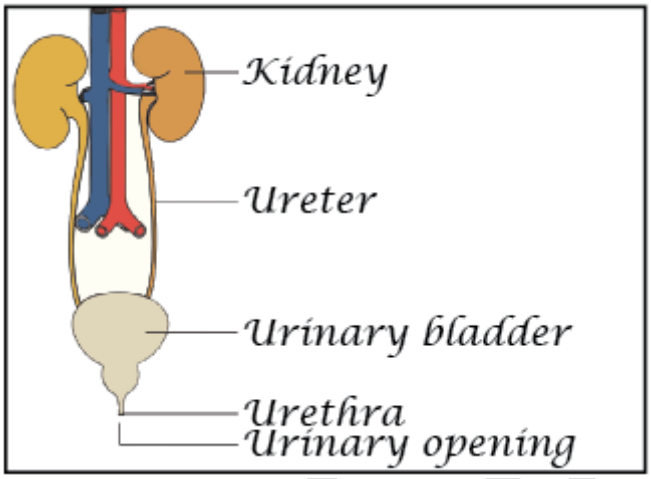
12. Why is it necessary to excrete waste products?

A. i) When our cells perform their functions, certain waste products are released.

ii) If these waste products are retained in the body, they become toxic and cause harm to the body.

iii) Hence, they need to be removed from the body.

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



14. Define excretion and name the system involved in it?

A. i) The process of removal of waste products from the body is called excretion. (or) The process of removal of wastes produced in the cells of the living organisms is called excretion.

ii) The system involved in this process is Excretory system.