

26/11/2022

Translocation :-

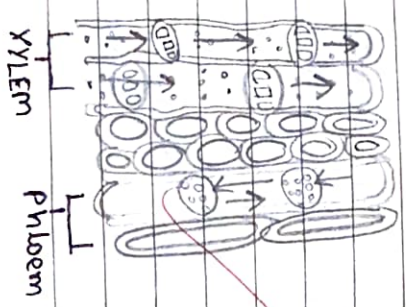
= The process of movement of substance from one location to another in an organism is known as translocation.

Unicellular organism \rightarrow

Diffusion and osmosis helps in movement of different substance

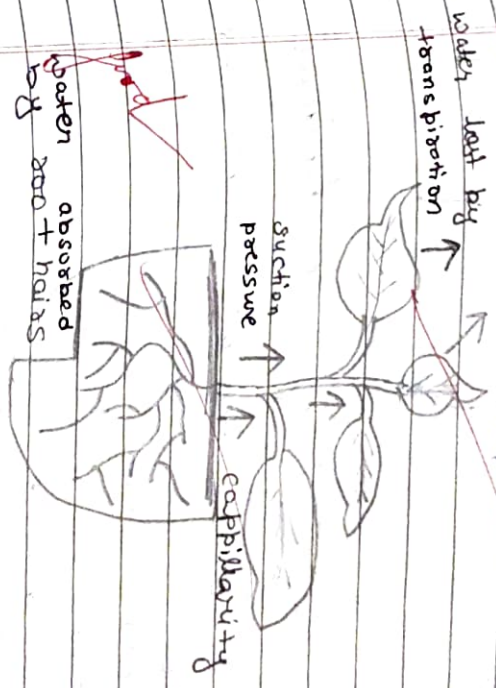
In plants

conducting tissue Xylem (Transport water and mineral)
Phloem (Transport food)



Transpiration :-

= Evaporation of water from the plant surface, especially from the Stomata on leaves.
 water lost by \uparrow transpiration



Importance of transpiration

- 1) It creates a suction pull which helps water to be transported to greater heights in tall trees.
- 2) It also helps to lower the plant's body temperature in summers.

21
write

Food	Prepared by	leaves	Sent to	Other food of plant
water & minerals	from	roots	sent to	other plant of the plant
Carbon dioxide	from	atmosphere	absorbed by	leaves for photosynthesis
Oxygen	from	atmosphere	absorbed by	all part of plant for respiration

Transportation in Animal

The substance to be transported are

- 1) digested food
- 2) Oxygen
- 3) Carbon dioxide
- 4) Excretory waste etc

the human ~~see~~ circulatory system

consists of :-

- 1) heart
 - 2) Blood
 - 3) Blood vessels
- Arteries
Veins
Capillaries

Heart :- It pumps the blood to different parts of the body

There are 4 chambers of heart in human

- Left atrium
- Right atrium
- Left ventricle
- Right ventricle

BLOOD

consists of :-

- 1) RBC \rightarrow respiratory carrier
- 2) WBC \rightarrow Protect against infection
- 3) Platelets \rightarrow helps in blood clotting
- 4) Blood plasma \rightarrow It holds blood cells

Blood vessels \rightarrow Arteries (O₂ rich blood)

Veins (O₂ rich blood)

Capillaries (exchange of substance) (takes place)

Blood Circulation

O_2
 \downarrow
 Lungs
 \downarrow
 hearts
 \downarrow
 different part
 of body

CO_2
 \downarrow
 From different
 part of body
 \downarrow
 heart
 \downarrow
 Lung
 \downarrow
 Nose

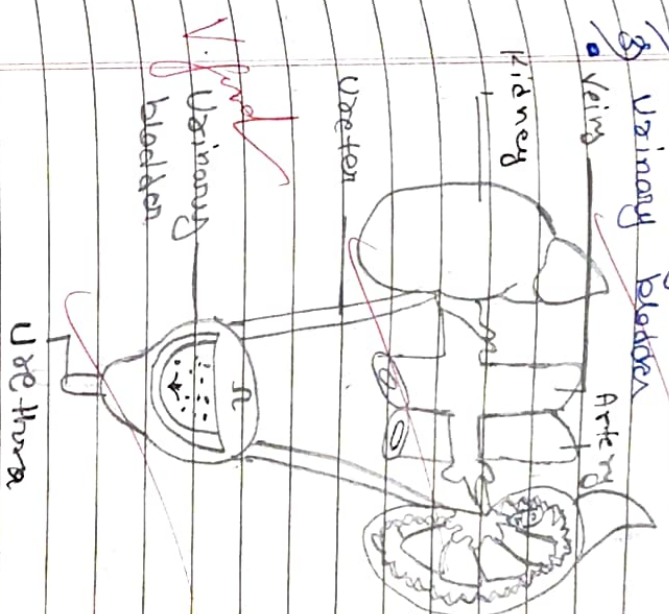
This is called double circulation.

Excretion in Animals

The removal of waste produced by living organism is called excretion.

The human excretory system consists of :-

- 1) The Kidneys
- 2) A pair of ureters
- 3) Urinary bladder
- 4) Vein



SOMETHING TO KNOW

A Fill in the blanks.

1) Water and minerals are transported to various parts of a plant by a network of tube called the xylem.

2) Haemoglobin is the respiratory carrier ~~of~~ in blood.

3) The upper chambers of heart are known as atria while the lower chambers are known as ventricles.

4) Septum is the muscular wall that divides the heart length-wise.

5) Excretion, in unicellular plant and animals, takes place through diffusion.

B) Write True or False

1) Phloem transports food, from the leaves, to the other parts of the plants
= True

2) Transpiration is harmful for the plants
= False

3) Oxygenated blood, from the lungs, flows into the left atrium and then to all other parts of the body
= True

4) Arteries carry the oxygen-deficient blood back to the heart
= False

5) Platelets help in the clotting of blood
= True

6) The red colour of the blood is due to the presence of haemoglobin
= False

3) ~~the~~ Veine is passed ~~the~~ out of the body through the ~~urethra~~

True

1) Answer the following question in brief:-

1) What will happen if the xylem tissue get damaged in a branch of tree?
= It will not able to transport water and ~~mineral~~.

2) Define transpiration.
= Evaporation of ~~water~~ H_2O from the plant surface, especially from the stomata on ~~leaves~~.

3) Name the 3 types of blood vessels.

= 3 types of blood vessels are -

- 1) Arteries
- 2) Veins
- 3) Capillaries

4) State any two functions of the blood.

= Two functions of the blood are -

1) Blood helps to ~~distibuted~~ distribute the digested food to all parts of the body.

2) Blood transports oxygen from the lungs to the tissues. It also transports carbon dioxide from the tissues to the lungs.

5) Define the term 'pulse rate'.
= The pulse rate is the same as the rate of heart beat per ~~sec~~ minute.

1. Answer the following question.

1) Briefly explain the transport of water and minerals in plants.

= Plants obtain water and minerals from the soil. This is usually done through the roots. Roots also have 'roots hair' that increase the surface area for the absorption of H_2O and minerals.

Water and ~~minerals~~ ~~nutrients~~
Minerals are transported by a network of tubes called xylem.

2) Describe, in brief, the function of heart.

= Heart pumps blood to different parts of the body. When the heart muscles contract, they squeeze the blood through the atria and then through the ventricles. Oxygenated blood from the lungs flows into left atrium and then to all parts of the body. ~~Deoxygenated~~
Deoxygenated blood, returning from the body, flows into the right atrium and then to lung for oxygenation.

3) State the function of 3 types of blood vessels.

= 3 types of blood vessels and their function are:-

1) Arteries = It carry oxygen-rich blood, from the heart, to other parts of the body.

2) Veins = It carry carbon dioxide-rich blood from the heart, to other parts of the body.

3) ~~Cap~~ Capillaries = It exchange of substance takes place.

4) Give one function of RBC, WBC and platelets.

= One function of RBC, WBC and platelets are:-

1) RBC = RBCs are cells containing the protein molecules haemoglobin.

it transport oxygen to different part of the body and is, therefore, known as the respiratory carrier. Blood is red in colour due to presence of haemoglobin.

2) ~~WBC = These~~ ~~These~~ These are the defence forces of the body. White blood cells destroy ~~harmful~~ harmful bacteria and dead cells. They protect our body against infections.

3) platelets = Platelets helps in clotting of blood. They are there to prevent excessive loss of blood if any part of the body gets injured.

5) Draw a neat and well labelled diagram of human excretory system.

