Biology (New Book) - 9th Class Biology Urdu Medium Chapter 9 Preparation

Q1. Difference between guard cells and epidermal cells.

Ans 1: Guard cells:
A pair of guard cells form a stoma, which is involved in the gas exchange of plants.

Ans 2: Epidermal cells:
Epidermal cells provide a protection to the plant from the xternal environment.

Q2. Transport is the loss ow water from plants, Is it a harmful phenomenonn? If no. what is its importance.

Ans 1: Transpiration is a necessary eveil It is harmful during he condition of drouhght. As wate loss cause wilting of the plant. But at the same time it is important for plant as it cause cooling effect, genertes transpirational pull and helps in gaseous exchange.

Q3. How is transpirational pull importnat in plants.

Ans 1: Transpiration creates a pull called transpiration pull which is principally repponsble for the conduction of wate and salsts from roots to the aerial part of the plant body.

Q4. Difference between xylem and phloem.

Ans 1: Xylem.
1. Exylem conducts wate and mineral salts and provide support and strength.
2. Xylem consists of two main types of cells namely tracheids and vessel elements.

Ans 2: Phloem:
1. Phloem conducts prepared food from leaves to stem and roots etc.
2. Two main types of cells in the phloem namely sieve tube element and companion cells.

Q5. Define Cohesion.

Ans 1: Cohesion is the attraction between nearby water molecules, which is possible because water is a polar molecule.

Q6. Name soem waste products of plants.

Ans 1: i. CO_2
ii. Extra Oxygen
iii. Excess water
iv. Calcium oxalate
v. Latex
vi. Resins

vii. Gums.

Q7. Differenc between nutrition and nutrients.

Ans 1: Nutrition:
Nutrition means the processes in whch food is prepared or obtained and converted into body substances for growth and energy

Ans 2: Nutrients:
Nutrients are teh substances required by organisms for energy, growth, repair , and maintenances.

Q8. Define Diffusion, Passive Transport and active Transport , Osmosis.

Ans 1: Diffusion :
It is the movement of molecules from an area of higher concentration to an area of lowr concentraton, until they areevenly spread out.
In organisms, the diffusion of molecules is of two types.
Passive Transport: It is themovement of molecules across a cell membrane from a hight o a low concentration, without using energy.
Active Transport: It is the movement of molecules across a cell membrane from a low concentraion to a hgih concentration, using energy.
Osmosis: It is the movement of water molecules through a semi-permeable membrane from a region of lower solute concentration to a region of highe solute concentration.

Q9. Difference between Hydrophytes and Halophytes.

Ans 1: Hydrophytes:
i. These plants live in water rich environments.
ii. Rate of transpiration is highest.
iii. Stomata ar epresent on the upper surface of leaf.
iv. These plans have thin cuticle.

Ans 2: Halophytes:
i. These plans live in sea water and are adapted to salty environments
ii. Salts enter in the bodies of such plants due to their higher concentration in sea wate, water tends to move out of their cells into the hypertonic sea water.
Example:
Many sea grasses are included in this group of plant.

Q10. Difference between Transpiraton and Guttaion

Ans 1: Transpiration :
1. Plants absorb waer from the soil by the roots. This absorbed water moves in the aerial parts of the plant from where the most of this water has been lost in the form of vapours into the atmosphere.
This loss is called transpiration.
ii. Transpiration always occur against the gravity
iii. Transpiration involves mainly the xylem cells.

Ans 2: Guttation :
i. The appearance of drops of water on the tips or edges of leaes is called guttation.
ii. Guttation is not to be confused with dew which condenses from the atmosphere on to the plant surfce.
iii. Some plants such as sea grasses and strawberry force this wate throuth special pores present at leaf tips or edges and form drops.
