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

Q1. Define osmoregulation.

Ans 1: It is define das th maintencacnce of the amounts of water and salss in body fluids i.e. blood and tissue fluids, e.g. blood glucose level remains about 1g /L despite eating a meal rich in carbohydrates.

Q2. What is transport in plants?

Ans 1: Definition :
Transport eans the movement of substances, such as water, nutrients, hormones, and waste products within an organism.

Q3. 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.

Q4. Difference between hydrophytes and xerophytes.

Ans 1: Hydrophytes:
i. They live in water -rich environmetns.
ii. Rae of transpiation is bighest
iii. Stomata are present on the upper surface of leaf.
iv. These plants have thing cuticl
v. The most common example of such plants is wate lily.

Ans 2: Xerophytes:
i. These plants are adapted to extreme dry conditions.
ii. They exhibit lowest rate of transpiration.
iii. Xerophytes possess sunken stomata.
iv. Thick cuticle is present in them
v. Cacti etc.

Q5. Define Vascular bundle

Ans 1: There are two types of compound tissues in plants a .exylem b. phloem.
Together they form the vascular bundles. Both exylem and phloem are composed of mor ethan one types of cells. Xylem tissue is responsibel for the transport of watr and dissolved substances from roots to aerial parts. Phloem ar eresponsible for the condiction of dissolved organic matter between different parts of plant body .

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. 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.

Q8. What is the role of nitrogen and magnesium in plant growth?

Ans 1: Role of Nitrogen:
i. Nitrogen is a necessary part of all proteins, enzymes and nucleic acids.
ii. It is also a part of chlorophyll.
iii. Plant roots absorb nitrogen in the form of nitrates.
iv. Carnivorous plants trap and digest small animals. Such plants fulfil their needs of nitrogen from the prey animals.

Ans 2: Role of Magnesium:
i. Magnesium is part of the chlorophyll.
ii. It also activates many plant enzymes needed for growth.
iii. It also helps in fruit formation and germination of seeds.
iv. Platn roots absorb magnesium in ionic form.

Q9. Define Transpiration.

Ans 1: Define:
The loss of waer in the form of vapours from plant surface is called transpiration.

Q10. State the roles of nitrogen and magnesium in plants.

Ans 1: Nitrogen:
i. Nitrogen is a necessary prt of all proteins, enzymes, nucleic acids and chlorophyll.
ii. Nitrogen helps plants for rapid growt, increasing seed and fruit production and improving the quality of leaf
iii. Platn roots absorb nitrogen in the form of nitrates
iv. Carnivorous plants fulfil their needs of nitrogen from the prey animals.

Ans 2: Magnesium:
i. Magnesium is part of the chlorophyll.
ii. It also activates many plant enzymes needed for growth.
iii. It also helps in fruit formation and geermination of seeds.

iv. Plant roots absorb magnesium in ionic form.