

Step Academy Official

Student Name _____	Roll Num _____	Class Name NEW 9TH	Paper Code _____
Subject Name BIOLOGY	Time Allowed 50 MINUTES	Total Marks 30	Exam Date _____
Exam Syllabus CHAP 9			

Q1. Choose the correct answer.

1X6=6

1. The primary function of root hairs is:
(A) Transport of nutrients (B) Storage of food (C) Increase surface area for absorption (D) Synthesis of proteins
2. Water moves from the soil into root cells by:
(A) Osmosis (B) Active transport (C) Diffusion (D) Bulk flow
3. The transpiration is regulated by;
(A) Mesophyll (B) Guard cells (C) Xylem (D) Phloem
4. Movement of molecules from an area of higher concentration to an area of lower concentration is called _____.
(A) Osmosis (B) Transpiration (C) Respiration (D) Diffusion
5. Which one factor is not affecting the rate of transpiration:
(A) Temperature (B) Wind (C) Water (D) Humidity
6. Which category of plants stores a small amount of water and has a thin cuticle?
(A) Hydrophytes (B) Xerophytes (C) Mesophyte (D) Succulents

Q2. Write short answers of the following questions.

2X7=14

- I . Define macronutrients and micronutrients and give examples.
- II . Transpiration is the loss of water from plants. is it a harmful phenomenon? If no, what is its importance?
- III . Define the following term: Translocation.
- IV . Differentiate between guard cells and epidermal cells.
- V . Differentiate between sink and source.
- VI . Define endodermis and pericycle.
- VII . Why plants absorb carbon dioxide and release oxygen during daytime?

Q3. Write detailed answers of the following questions.

5X2=10

1. Describe temperature, wind and humidity as the factors affecting the rate of transpiration.
2. Explain the mechanism of food translocation by Pressure Flow Mechanism.