



# KALPAVRUKSHA MODEL SCHOOL

## Online class Assignments Answers

**Class: VII**

**Sub: Biology**

**Date: 29.05.2021**

**Topic: Nutrition in plants**

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### **I. Answer the following questions:**

1. Describe how green plants obtain the things that are necessary for photosynthesis.

Ans: Chlorophyll is usually present in the leaves in structures called chloroplasts. Light energy is absorbed by the chlorophyll. Carbon dioxide is obtained from the atmosphere through small openings called stomata mostly present on the underside of the leaves. The root system of plants enables them to obtain water from the soil. Water and soluble nutrients are transported from roots to other parts of the plant through structures called xylem. The starch formed as a result of photosynthesis is transported to the various parts of the plants by structures called phloem.

2. Write the reaction that takes place during photosynthesis.

Ans:

3. Define heterotrophic nutrition. What are the different types of heterotrophic nutrition in plants?

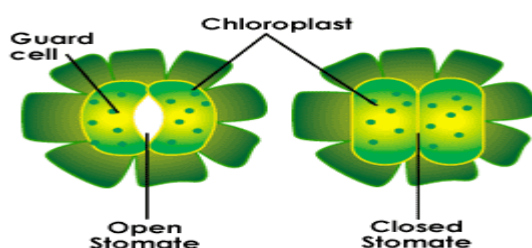
Ans: The mode of nutrition in which an organism cannot make its own food and depends on other organisms for food is called heterotrophic nutrition.

Different kinds of heterotrophic plants are

- a. Parasitic plants
- b. Saprophytic plants
- c. Insectivorous plants
- d. Symbiotic plants

4. Explain how plants take in carbon dioxide through stomata with the help of a diagram.

Ans: Each stomata is bounded by two half-moon shaped guard cells. The guard cells regulate the opening and closing of the stomata. When there is enough light and water, the guard cells swell up and curve away from each other, thus opening the stomata. This allows carbon dioxide to enter the cells of the leaf.



5. Differentiate between xylem and phloem.

Ans:

<b>Xylem</b>	<b>Phloem</b>
1) Xylem is a tubular structure which transports water and soluble nutrients from the roots towards all parts of the plant.	1) Phloem is also a tubular structure which transports starch(food) formed as a result of photosynthesis and other nutrients needed by plant.
2) Tubular with hard walled cells	2) Tubular with soft walled cells
3) Unidirectional – moves up the plant's stem	3) Bi-directional – moves up or down the plant's stem