KALPAVRUKSHA MODEL SCHOOL

Assignments – 4 Answers

Class: VII **Sub: Biology** **Date: 12.06.2021**

Topic: Nutrition in plants

I. Answer the following questions:

1. Define symbiosis. Give examples.

Ans: Organisms live together and share shelter and nutrients with each other. This is called symbiosis. Ex: lichens and fungi, bacteria and peas.

2. Differentiate between insectivorous and symbiotic plants.

Insectivorous plants	Symbiotic plants
1) Plants that derive their nutrients by trapping and consuming insects are called insectivorous plants.	1)Plants that live in association with other organisms, share food are called symbiotic plants
Ex: pitcher plant, sundew, Venus flytrap, bladder worts	Ex: lichens, fungi, bacteria and root nodules of pea plant

3. Manish left a wooden plank on the grass in the garden by mistake. What will happen to the grass beneath the wooden plank?

Ans: Grass will die because it won't be getting required oxygen and sunlight for respiration and photosynthesis.

4. Some of the starch manufactured by plants is stored in underground plants. This happens in potato, sweet potato and carrot plants. Can you name other plants where starch is stored?

Ans: The starch in sugarcane is stored in stem, leafy vegetables in leaves, grains such as maize, wheat and sugar in the grains., etc.

5. Differentiate between Autotrophic nutrition and Heterotrophic nutrition.

Autotrophic nutrition	**Heterotrophic nutrition.**
1. The mode of nutrition whereby a living organism makes its own food is called **Autotrophic nutrition.**	1. The mode of nutrition in which organisms cannot manufacture food and have to depend upon other plants and animals to obtain energy is called **Heterotrophic nutrition.**
2. This mode of nutrition requires a green pigment called chlorophyll.	2. This mode of nutrition does not require chlorophyll.
3. This mode of nutrition occurs in green plants.	3. This mode of nutrition occurs in non-green plants and animals.

6. With the help of three examples, discuss how leaves of insectivorous plants are modified to trap insects.

Ans: Pitcher plant: The leaf of the pitcher plant is modified to form a tubular pitcher-like structure. The inside of the pitcher is lined with downward pointing hair that does not allow any trapped insect to climb up and escape. The fluid at the bottom of the pitcher contains digestive juices that digest the insect.

Bladderworts: The slender leaves of bladderworts bear a large number of very small, pear-shaped bladder structure, which act like trapdoors and suck in small insects in less than a second.

Venus flytrap: The Venus flytrap has leaves that are modified to trap insects. The inner surface of the leaves have short, stiff hair. When an insect touches the hair, the leaves snap shut in less than a second. The insect is then digested.