

SBIOA SENIOR SECONDARY SCHOOL

CLASS: VII

CHAPTER – 1 SCIENCE

Nutrition in Plants

Answer the following questions:

1. Why do organisms need to take food?

Ans:

All organisms need to take food to get energy for the growth, development and maintenance of the body.

2. Distinguish between a parasite and a saprotroph.

Ans:

S.No.	Parasite	Saprotroph
1	The organism that grows on the body of another organism and derives nutrients from it.	The organisms that obtains nutrients from the dead and decaying organic matter.
2	They take readymade food from the host.	They take digested and decayed food.
3	They directly feed on living organism for their nutrition.	They feed on dead and decaying organism.
4	Eg: Cuscuta and Orchids.	Eg: Fungi and Mushroom.

3. How would you test the presence of starch in leaves?

Ans:

- Take a potted plant with variegated leaves (money plant or crotons).
- Keep the plant in dark room for three days so that all the starch gets used up.
- Now select a leaf cover its portion with a blank strip paper and keep the plant in sunlight for about six hours.

- Pluck the leaf from the plant, mark the uncovered area in it and trace them on a sheet of paper.
- Dip the leaf in boiling water for a few times.
- After this, immerse it in a beaker containing alcohol.
- Carefully place the above beaker in a water- bath and heat till the alcohol begins to boil.
- Now dip the leaf in a dilute solution of iodine for a few times.
- Take out the leaf and rinse off the iodine solution.
- You observe that the presence of starch in various areas of the leaf which was uncovered.

4. Give a brief description of the process of synthesis of food in green plants.

Ans:

Leaves are the food factories of plants. The synthesis of food in plants occurs in leaves. Therefore, all the raw materials (water, sunlight and carbon dioxide) must reach there. Water and minerals are transported to the leaves by the vessels which run like pipes throughout the root, the stem, the branches and the leaves. The leaves have a green pigment called chlorophyll which helps leaves to capture the energy of the sunlight. This energy is used to synthesis (prepare) food from carbon dioxide and water.

5. Show with the help of a sketch that the plants are the ultimate source of food.

Ans:

All the living being depends on plants whether directly or indirectly. **For example**, the plant eater animal depends directly on plants but carnivore depends indirectly on plants.

SBIOA SENIOR SECONDARY SCHOOL – TRICHY

STD: VII

WORKSHEET – I

DATE:

NAME:

GENERAL SCIENCE

DAY:

NUTRITION IN PLANTS

Answer the following:

1. Why do organisms take food?
2. Draw and explain about cell.
3. Give an example for parasite.
4. What is known as insectivorous plants? Give example.
5. There are some plants which do not have chlorophyll. They cannot synthesize food. How do they survive and from where do they derive nutrition?
6. Define the term symbiosis.
7. Explain in detail photosynthesis process takes place in plants.
8. Carbohydrates are made of , and
9. What is known as saprotrophic nutrition?
10. Define the term Heterotrophs.

SBIOA SENIOR SECONDARY SCHOOL – TRICHY – 07

CLASS: VII

GENERAL SCIENCE

WORKSHEET – 2

I. Answer the following:

1. The largest gland in the human body is
2. Amoeba digests its food in the
3. The inner wall of the small intestine has many finger-like outgrowths called
4. The grass is rich in
5. The process of taking food into the body is called
6. What is tooth decay?

7. Match the following:

A

B

(a) Salivary glands

Egestion

(b) Carbohydrates

Amino acids

(c) Proteins

Fatty acids and glycerol

(d) Fats

Sugar

(e) Large intestine

Saliva secretion