

Topic-Mode of nutrition in plants

Points To Remember:

- Carbohydrates, proteins, fats, vitamins and minerals are essential components of food, these components are called nutrients.
- And animals are dependent directly or indirectly on plants for food.
- Nutrition is the mode of taking food by an organism and its utilization by the body.
- Green plants are called autotrophs as they prepare their own food from simple substances.
- Animals and most other organisms are called heterotrophs as they take in ready-made food prepared by the plants.
- The synthesis of food in plants occurs in leaves.
- Photosynthesis can be carried out in presence of chlorophyll, sunlight, carbon dioxide, and water.
- Complex chemical substances like carbohydrates are the products of photosynthesis.
- Pitcher plants and Venus flytraps are insectivorous plants.
- Fungi derive nutrition from dead and decaying matters they are called saprotrophs.

Go through the below links, it will help you to understand the Ch-Nutrition in plants in a better way.

And the following questions:

<https://youtu.be/aBghNAghCYY>

<https://youtu.be/VwA-874cRag>

<https://youtu.be/Q96qKArCGe4>

<https://youtu.be/B8QzwdJ5Mzk>

1.	<p>Fill in the blanks.</p> <p>a) Plants prepare their food by using raw materials present in _____.</p> <p>b) _____ helps leaves to capture the energy of sunlight.</p> <p>c) During photosynthesis plants take in _____ and releases _____.</p> <p>d) Lichen is a symbiotic association between _____ and fungi.</p>
2.	<p>State true and false.</p> <p>a) Sun is the ultimate source of energy for all living organisms.</p> <p>b) Carbon dioxide is released during photosynthesis.</p> <p>c) During photosynthesis solar energy is converted into chemical energy.</p> <p>d) Animals are autotrophs.</p>
3.	<p>Choose the correct option.</p> <p>a) In saprotrophic mode of nutrition organisms take in nutrients from</p> <p>i) Oxygen mask ii) Water mask iii) Pollution mask iv) None of these</p> <p>b) Where we can see Rhizobium bacteria?</p> <p>i) Dead matter ii) Decaying matter iii) Both a and b iv) None of these</p> <p>c) Amarbel is an example of</p> <p>i) Parasite ii) Host iii) Autotrophs iv) Saprotrophs</p> <p>d) The product of photosynthesis is</p> <p>i) Carbohydrate ii) Protein iii) Fats iv) All of these</p>
4.	<p>Answer the following questions in one word.</p> <p>a) Name a plant that has both autotrophic and heterotrophic mode of nutrition.</p> <p>b) Name a parasitic plant with yellow, slender and tubular type of stem.</p> <p>c) Name the pores present in leaves through which exchange of gas takes place.</p> <p>d) Name the organism responsible for converting atmospheric nitrogen into soluble forms.</p> <p>e) Name the edible fungi.</p>

- f) Some organisms live together and share shelter and nutrients, name the type of relationship.
- g) Name the food factories of plants.
- h) Name the tiny pores present on the surface of leaves.
- i) Name the green pigment present in leaves.

5. Match column-I with column-II

Column- I	Column-II
Chlorophyll	Rhizobium
Nitrogen	Heterotrophs
Cuscuta	Pitcher plant
Animals	Leaf
Insects	Parasite