8-A

CLASS - (VII)

Chapter - (I)

(Nutrition in plants)

(note book)

1) why do organisms need to take food.

Ans → All organism require energy for their life processes. plants prepare their food and acquire nutrients from abiotic components like soil, air, water and sunlight.

2) Distinguish between a parasite and a saprotroph.

Ans → a) parasite

1) parasites live on or in a host and gets its food at the expense of its host.

2) Example — roundworm.

b) Saprotroph

1) Acquire nutrients from dead and decaying matter.

2) Example — Fungi

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

Ans → The presence of starch in leaves can be tasted by iodine test. when we remove chlorophyll from leaf by boiling it in alcohol and Then Food put two drops of iodine solution its colour change to blue indicates the presence of starch.

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

Ans →

1. water is taken from the roots of the plant; and it is transported to leaves of the plants.

2) CO_2 (carbon dioxide) from air enter the leaves through pores called stomata. This diffuses the cell containing chlorophyll.

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3) water molecule is broken down into Hydrogen and oxygen with the help of sunlight.

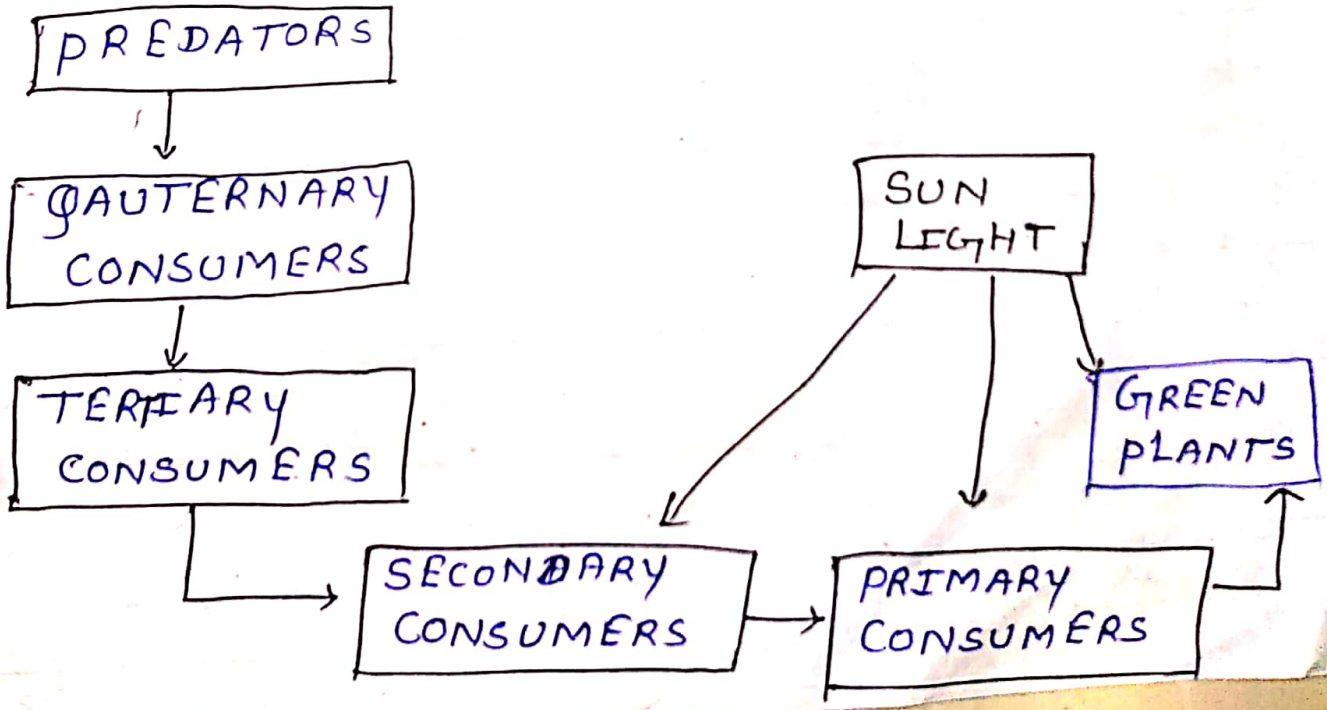
4) Hydrogen combines with oxygen and Hydrogen to from carbohydrates.

5) photosynthesis is represented by the following equation.

carbon dioxide + water $\xrightarrow{\text{sunlight}}$ carbohydrates + oxygen.

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

Ans →



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6) Fill in the blanks. (Book Activity)

a) Green plants are called autotrophs since they synthesise their own food.

b) The food synthesised by the plants is stored as Starch.

c) In photosynthesis solar energy is captured by the pigment called Chlorophyll.

d) During photosynthesis, plants take in Carbon dioxide and release oxygen gas.

7) Name the following.

1) A parasitic plant with yellow, slender and tubular stem → (Cuscuta)

2) A plants that is partially autotrophic and hetrotrophic mode of nutrition – (pitcher plant)

3) The pores through which leaves exchange gases. → (Stomata)

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8) Tick the correct answer.

a) Amaubel is an example of:

Ans → ii) parasite.

b) The plant which traps and feeds on insects is:

Ans → iii) pitches plants.

9) Match the items given in column I with those in column II:

Ans →

Column I	Column (II)
1) Chlorophyll	Leaf
2) Nitrogen	Rhizobium ~~Bacteria~~
3) Amaubel	parasite
4) Animals	Heterotrophs
5) Insects	pitcher plant

10) Mark 'T' if the statement is true and 'F' if it is false.

(i) carbon dioxide is released during photosynthesis.

→ (False)

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ii). plants which synthesise their food themselves are called saprotrophs.– (False)

iii) The product of photosynthesis is not a protein –: (True)

iv) Solar energy converted into chemical energy during photosynthesis –:(True)

11) Choose the correct option from the following

Which part of the plant takes in carbon-dioxide from the air for photosynthesis. (stomata)

12) plants take carbon dioxide from the atmospheric mainly through their –: (leaves)

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(Extra question's)

(Note book)

1) What are nutrients ? Give Example.

Ans → The Components of food which are essential for our body called nutrients. Carbohydrates, protein, fats vitamins and mineral are the nutrients.

2) what are nutrition ?

Ans → The process of obtaining and utilising food is called nutrition.

3) Explain the terms autrotrophic and heterotrophic nutrition.

Ans → Autotrophic nutrition → In Autotrophic nutrition ; organism can prepare their own food from simple inorganic molecules.

Ex → green plants perform Autotrophic nutrition.

2) Heterotrophic nutrition → In Heterotrophic nutrition organisms takes readymade food from the other organism.

Ex → (Animals)

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4) What are insectivorous plants.

Ans → Insect eating plants are called insectivo-rous plant. The leaves of insectivorous plants are modified is several ways (like pit-cher) for trapping insects. The trapped insects are killed by these plants and the nutrients of the insects bodies are sucked by the plants. ~~Ex~~

Example of insectivorous plant are :- (pitcher plant)

5) What is symbiotic relationship? Explain with example.

Ans → Some organisms live together and share shelter and nutrients; this is called symbiotic relationship.

Example — Rhizobium and root nodules of legumes.

6) How do plants get carbon dioxide and water.

Ans → Carbon dioxide enters the leaf through tiny pores called stomata. They are found in under side of leaves. Gases move in and but through stomata.

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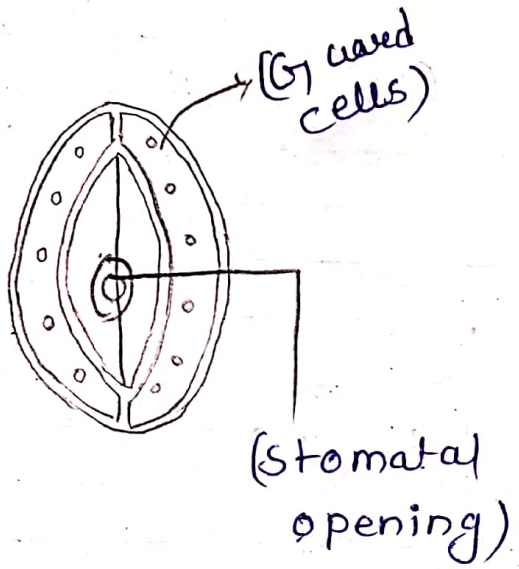

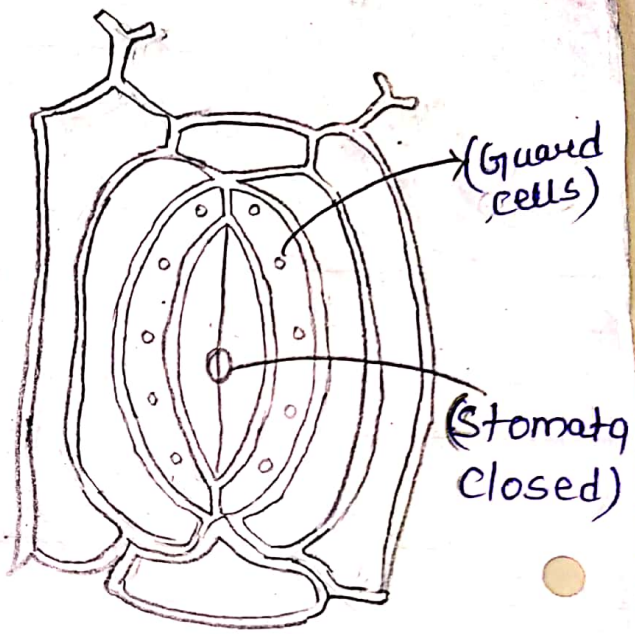

7) what are algae? Can it prepare its own food.

Ans → The slimy green patched organism which grow in ponds or in other stagnant water bodies, are called algae.

Yes it Can prepare its food by photosynthesis process ~~became~~ because it Contain Chlorophyll.

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