



परमाणु ऊर्जा शिक्षण संस्था, मुंबई

Atomic Energy Education Society

Session: 2023 – 24

CLASS- VII

SUBJECT : SCIENCE

WORKSHEET No. – 1

Name of the Chapter: **Nutrition in Plants**

I. Choose the correct option:- (1 x 10 = 10M)

- The green pigment in the leaves is called _____.
a. Stomata b. Chlorophyll c. Symbiosis d. None
- This bacterium is found in the root nodules of leguminous plants.
a. Rhizobium b. Yeast c. Algae d. E.coli
- Which among these is a parasitic plant?
a. Guava tree b. Pitcher plant c. Mango tree d. Cuscuta
- The plant which traps and feeds on insects is _____.
a. Pitcher plant b. Rose plant c. Mimosa plant d. None
- The gas released during the process of photosynthesis is _____.
a. Nitrogen b. Carbon dioxide c. Oxygen d. Methane
- Mushroom has _____ mode of nutrition.
a. Autotrophic b. Saprotrophic c. Symbiotic d. None
- Two organisms live together by mutually benefitting each other. This kind of association is called _____.
a. Symbiosis b. Autotrophic mode c. Parasitic mode d. None
- Lichens are the association of
a. An autotroph and a saprotroph b. An autotroph and a heterotroph
c. A green plant and non-green plant d. All of the above

9. Which of the following organisms gets its food from the dead and decaying matter?
- a. Algae b. Amoeba c. Fungi d. Insectivorous plants
10. Which of the following raw material is available in air for photosynthesis?
- a. Oxygen b. Carbon dioxide c. Nitrogen d. Hydrogen

II Answer in one sentence. (1 x 10 = 10M)

1. How do plants prepare their own food?
2. Why can our body not make food from carbon dioxide, water and minerals like plants do?
3. How do water and minerals absorbed by roots reach the leaves?
4. Farmers spread manure or fertilizers in the fields and gardeners use them in lawns or in pots. Why are they added to the soil ?
5. There are some plants with deep red, violet or brown leaves. Whether these leaves also carry out photosynthesis?
6. Which organisms form slimy and green patches in ponds or in other stagnant water bodies?
7. Name four parasites that suck our blood.
8. The pitcher plant is green and carries out photosynthesis, then why does it feed on insects?
9. Why is cuscuta called a parasite?
10. Name four household things which get easily spoilt by fungi.

III Answer in two to three sentences. (2 x 10 = 20M)

1. 'All animals depend upon the plants for their food.' Justify the statement.
2. What are the functions of food?
3. Explain the structure of cell.
4. Draw a neat labelled diagram of stomata.
5. Why is it true to say that insectivorous plants are partial heterotrophs ? Explain.
6. Draw a diagram of a section of leaf and label its various parts.
7. Why do desert plants have spine-like leaves? How does photosynthesis occur in them?
8. How does growing pulses in the field help the soil?
9. Distinguish between Saprophytes and Parasites
10. Write the differences between autotrophic and heterotrophic mode of nutrition.

III Answer in three to four sentences. (3 x 5 = 15M)

1. Explain two main modes of nutrition with examples.
2. Why fertilisers and manures are required to be added to the soil periodically?
3. Write the importance of Rhizobium bacteria for the farmers.
4. What is symbiosis? Explain with an example.
5. Wild animals like tiger, wolf, lion and leopard do not eat plants. Does this mean that they can survive without plants? Give suitable explanation?

III Answer the following. (5 x 5 = 25 M)

1. (a) Draw a diagram of a pitcher plant to show the following parts : (i) Pitcher (ii) Lid
(b) What is the mode of nutrition of this plant?
(c) Is it an autotroph or partial heterotroph?
2. (a) Draw a schematic diagram showing photosynthesis.
(b) What are the products of photosynthesis ?
(c) Can all plants do photosynthesis ?
3. Explain the mechanism of eating insects by a pitcher plant.
4. Describe an activity to test the presence of starch in leaves?
5. Vivek went to visit his grandfather in village where he saw that his grandfather's field of wheat is infected with fungus but no one is aware of this. Vivek told him that he should use an antifungal agent in his fields to stop this infection ?
(a) What is fungus ?
(b) Can fungus only cause disease or can it be helpful also ?
(c) Give two examples of useful fungi.
(d) What values are shown by Vivek ?