CHAPTER 1
PLANTS — FRIENDS FOR LIFE

ASSIGNMENT FOR SA AND FA

1. Tick (√) the correct options:
   (a) The process which gives us food and oxygen:
      (i) eating (ii) photosynthesis (iii) breathing (iv) none of these
   (b) ______________________ are known as the ‘kitchen’ of the plants.
      (i) Leaves (ii) Stem (iii) Roots (iv) Branches
   (c) The green colour of the leaves is because of presence of a green coloured pigment, called:
      (i) stomata (ii) crotons (iii) chlorophyll (iv) all of these
   (d) The food substance prepared by photosynthesis is______________.
      (i) glucose (ii) starch (iii) sugar (iv) none of these
   (e) Extra food is converted into starch and can be stored in:
      (i) fruits (ii) stem (iii) roots (iv) all of these

2. State whether the given statements are true (T) or false (F):
   (a) Stem makes food for the plant.          [T]
   (b) Roots not only affix the plant firmly to the ground but also soak up water and minerals for the plants. [T]
   (c) Sunlight provides energy for preparing food in the leaves. [T]
   (d) Potato is a food-storing root.          [T]
   (e) Tiny openings on the surface of a leaf are called chlorophyll. [F]

3. Fill up the blanks:
   (a) Air contains many gases, but the most essential gas for living things is ________________________.
   (b) The raw materials needed for photosynthesis are ____________________, ____________________, __________________________, and ____________________.
   (c) Stem bears branches on which ______________________ and ______________________ grow.
   (d) ______________________ helps in trapping sunlight for ________________________.
   (e) ‘Photo’ means ________________________ and ‘synthesis’ means ____________________.
4. Match the following:
   (a) Root                  Photosynthesis
   (b) Stem                 Exchange of gases
   (c) Leaf                 Bears branches
   (d) Stomata              Food in plants is stored as this
   (e) Starch               Absorbs water

5. Mention the main functions performed by:
   (a) Roots

                                       
                                       
                                       
   (b) Stem

                                       
                                       
                                       
   (c) Leaves

                                       
                                       
                                       
6. Answer the following questions:
   (a) Define photosynthesis.

                                       
                                       
                                       
   (b) How do plants take up water from the soil?

                                       
                                       
                                       
   (c) Explain the structure of leaves with diagram.
(d) Why do bigger plants have more number of leaves?

(e) How is food prepared by leaves transported and utilised by the plant?

(f) What are stomata? What role does it play?

7. HOTS questions (Higher Order Thinking Skills):
   (a) Give a distinct feature of plants that makes them different from other living beings?

   (b) Are flowers on plants just for beauty or do they have any special function?

ASSIGNMENT FOR FA

8. Perform the iodine test on the following food items and write the result:

<table>
<thead>
<tr>
<th>Food item</th>
<th>Presence of starch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Sugar</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Rice grains</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Boiled rice</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Slice of potato</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Flour</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Dough</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

9. Make a kitchen garden

Plant some vegetable seeds, like potato, okra, green chilli, etc., in your garden or pots. Water them regularly and add manure to them. Watch your vegetables grow.
ASSIGNMENT FOR SA AND FA

1. Tick (✓) the correct options:
   (a) Broadly, the plants are divided into two groups according to their habitat:
       (i) terrestrial and aquatic plants    (ii) terrestrial and land plants
       (iii) aquatic and water plants      (iv) desert and floating plants
   (b) Features that help in surviving in different kinds of habitats are called:
       (i) habits                        (ii) adaptations
       (iii) both (i) and (ii)        (iv) none of these
   (c) Floating plants are:
       (i) small in size                (ii) light in weight
       (iii) with roots not fixed to the waterbed (iv) all of these
   (d) These plants remain completely under water and are called:
       (i) underground plants           (ii) underwater
       (iii) submerged plants            (iv) both (ii) and (iii)
   (e) ___________________________ in some aquatic plants have waxy, waterproof coating
to protect them from rotting.
       (i) Stem                        (ii) Leaves
       (iii) Both (i) and (ii)        (iv) None of these

2. State whether the given statements are true (T) or false (F):
   (a) There are over 2,000,000 different types of plants all over the world.  [ ]
   (b) The kind of weather and soil that plants need for their survival and
growth is called their surroundings.  [ ]
   (c) Plants that grow on land are called aquatic plants.  [ ]
   (d) As leaves of some aquatic plants float on the surface, they protect
small water animals from the heat of the Sun.  [ ]
   (e) Trees have no stomata in their leaves and breathe through their body surface.  [ ]

3. Fill up the blanks:
   (a) A place with suitable living conditions is known as ________________________.
   (b) There are no leaves in some desert plants; the ________________________ of these
plants is green, which helps in the process of photosynthesis.
   (c) The plants found in marshy areas are called ________________________.
(d) The trees found in the plains are ______________________ trees.
(e) ______________ grows well in acidic soil.

4. **Match the following:**
   (a) Coniferous trees  Remove carbon dioxide present in water
   (b) Desert plants  Clayey soil
   (c) Marshy areas  Water
   (d) Underwater plants  Cones
   (e) ‘Aqua’  Well developed roots

5. **Give examples of the following:**
   (a) Plants in mountains: ______________________________________
   (b) Plants in desert: ______________________________________
   (c) Plants in marshy areas: ______________________________________
   (d) Plants in plains: ______________________________________
   (e) Plants in hot and damp soil: ______________________________________
   (f) Fixed aquatic plants: ______________________________________
   (g) Floating aquatic plants: ______________________________________
   (h) Underwater aquatic plants: ______________________________________

6. **Answer the following questions:**
   (a) What do you understand by adaptation? Give an example.
       ______________________________________
       ______________________________________
   (b) What are coniferous trees? Explain how are they adapted to survive in mountainous region?
       ______________________________________
       ______________________________________
       ______________________________________
   (c) Why do some desert plants have spines instead of leaves?
       ______________________________________
       ______________________________________
(d) What are breathing roots?


(e) Differentiate between deciduous and evergreen trees.


(f) What are aquatic plants? Name the different types of aquatic plants.


7. HOTS questions (Higher Order Thinking Skills):

(a) Rice crop is completely submerged in water. Is it an aquatic plant or a terrestrial plant?


(b) Give some features of two trees that have adapted according to their surroundings.


ASSIGNMENT FOR FA

8. Visit a botanical garden and observe the variety of plants growing there. (A botanical garden is a place displaying a wide range of plants labelled with their botanical/scientific names).

9. Make a project/P PowerPoint presentation on the different types of plants/trees found all around the world.