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| **PODAR INTERNATIONAL SCHOOL, CHINCHWAD**  **2020-21**  **EVS CLASS WORK**  **Ls-Types of plants**  **GRADE IV** |

Instructions for writing in note book.

* Write date in left hand side top corner.
* Do not write anything above upper margin.
* Name of the lesson to be written below the upper margin in the centre.
* Leave one line after every answer.
* Do not write any extra questions on your own in classwork notebook.
* Draw diagrams neatly with pencil with labelling on right hand side.
* Old note books can be utilised as classwork notebooks.
* Draw margins on both sides of the page.

**I. Answer the following**

Q1 What type of adaptations can be seen in the trees growing in the plains?

**Ans:** Following are the adaptations that can be seen in the trees growing in the plains.

1. They shed leaves in autumn season and new leaves grow in spring season.
2. Most of the plants /trees found on plains have wide branches with many leaves on it and thick trunk.

Eg. Mango tree, Sheesham Tree

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Q2 How are the plants in coastal regions adapted to fight extreme conditions of excess salt and strong winds?

**Ans**: a) Plants found in coastal regions have thick and shining leaves to reduce water loss.

1. The roots of these plants and trees grow near the surface of the soil and spread out over a wide area.

Eg. Coconut tree

Q3 Name the types of aquatic plants. Explain adaptation of each aquatic plant.

**Ans**: There are three types of aquatic plants namely underwater, floating and fixed.

1. Adaptation in underwater plants-

a) Underwater plants have ribbon like leaves.

b) The stem and leaves have air spaces that makes them flexible to move with the water current.

c) Stem is rooted in waterbed and they utilize carbon dioxide dissolved in water for the process of photosynthesis.

Eg. Hydrilla, water starwort

1. Adaptation in floating plants-
2. These plants are small in size, not rooted in the soil and float on water.
3. The spaces between the stem cells are filled with air thus making the plant light and spongy.
4. These air spaces allow them to freely float on the water surface.

Eg. Water lettuce, duckweed

1. Adaptation in fixed plants-
2. The stem is fixed to the water bed.
3. The roots are hollow with air spaces, light weight and extend to the bottom of the pond or lake.
4. The leaves are broad and have wax like coating that helps it to float on water and protect from rotting.

Eg. Water lily, lotus

Q4 What are saprophytic plants?

**Ans**: a) Plants that cannot make their own food and absorb food from dead plants and animals are called saprophytic plants.

b) Saprophytes are also called as non-green plant as they lack chlorophyll.

Eg. Coral root plant, Indian pipe plant, yeast, fungi etc.

Q5 What are insectivorous plants? Write its habitat.

**Ans**: a) Plants that gain nutrition by feeding on insects are called as insectivorous plants.

b) They are found on unfertile land which does not provide it with sufficient nutrition and hence they gain nutrition by feeding on insects. Eg. Venus fly trap, pitcher plant

Q6 Write the adaptations of the following plants growing in different regions.

1. Plants growing in hilly region

**Ans**: a) Plants are tall and straight which enables them to receive sunlight and bear leaves throughout the year.

b) Leaves are mostly needle shaped and have waxy coating on them to slide of the snow and protect them from extreme cold.

c) Seeds are enclosed in cone to protect them from cold weather.

Eg. Pine tree, deodar tree

1. Plants growing in desert

**Ans**: a) Leaves of cactus are modified into thorns to prevent loss of water as well as from grazing animals.

b) The stem is fleshy as it stores water inside it and performs the function of photosynthesis.

c) The roots are spread over a large area and fewer leaves can be found on trees.

Eg. Kikar tree, babul tree, date palm, Khejri tree

Q 7. Write the adaptation of the following plants:

**1. Lotus**

**Ans**: Roots of the lotus plant remain fixed to the bottom of the water body. The thin, long and hollow stem gives them the flexibility to

move sideways, thus enabling them to stand in strong water currents.

**2. Algae**

**Ans**: These are floating plants. The plant body is green in colour, light and spongy which enables them to float on water easily.

**3. Venus fly trap**

**Ans**: The modified leaves of this carnivorous plant help them to trap insects which are used as food to gain nutrition for the plant.

**II. Give reasons**

1. Cactus has thorns instead of leaves.

**Ans**: Cactus have thorns instead of leaves to prevent water loss and from grazing animals.

1. Plants growing in different regions differ from each other.

**Ans**: Plants growing in different regions differ from each other because of the difference in the climate and type of soil in different regions.

1. Roots of plants growing on the rock shores are tough.

**Ans**: Roots of plants growing on the rock shores have to make way through the rocks. Therefore, their roots are tough.

**III. Name the following**

1. Two underwater plants- Vallisneria, hydrilla
2. Two carnivorous plants- Venus fly trap, sundew (drosera)
3. Crops growing on plains- wheat, rice
4. Trees found in coastal region- Areca nut tree, Pandanus tree
5. Plants found in hilly regions- Pine tree, fir tree
6. Two plants floating on water- Duckweed, water hyacinth

**IV. Fill in the blanks**

1. Desert plants have adapted themselves to grow with very little water.
2. In cactus, the process of photosynthesis is carried out in the stem.
3. Big and broad leaves allow a lot of water to evaporate during the process of transpiration.
4. The plants that grow in marshy areas are called as mangroves.
5. Aerial roots are found in the plants that grow in mangrove forest.
6. The leaves and stem of underwater plants are very flexible and have air spaces.
7. Fixed plants breathe through the pores present on the surface of the leaves.
8. Insectivorous plants grow in infertile soil and eat insects for extra nutrition.
9. Indian Pipe and Coral Root are examples of non-green plants because they do not have chlorophyll.
10. Pitcher plant has medicinal properties and are used to cure stomach and digestive ailments.

**V. True or false**

1. Plants that grow on land are called as terrestrial plants.
2. Fixed aquatic plants have their stems fixed in the soil of the riverbed or pond.
3. Plants found in desert have broad leaves.
4. Sal tree is an example of terrestrial plants.
5. Mosses and ferns are found in cracks of rocks in cold regions.
6. Excess salt and windy weather are the climatic conditions in mangrove forest.
7. Plains are the least fertile regions on the Earth.
8. Saprophytic plants can make their own food.

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