



Class: 5

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Prepared on-

Subject: Science

Lesson-5: Plant life

Shared on-

I. Key words:

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|-----------------|----------------|
| 1. artificial | 7. stock |
| 2. reproduction | 8. scion |
| 3. vegetative | 9. germination |
| 4. sexual | 10. explosion |
| 5. asexual | 11. rabi |
| 6. grafting | 12. kharif |

II. Pre activity: List the things which is made by using various parts plants.

III. Name the following.

Q.1.what is the name of the process by which seeds get scattered to different places?

Ans- Seed dispersal

Q.2. List the modes of dispersal of seeds.

Ans- Dispersal by Wind, water, animals and humans, dispersal by explosion of seeds.

Q.3. What are the different ways in which plant reproduce?

Ans- 1.Vegetative reproduction
2. Reproduction from seeds

Q.4. Name the favorable conditions in which a new plant can grow.

Ans- Favourable conditions to grow new plants are-Warmth, sunlight, rich and fertile soil, water and fresh air.

Q.5. Name any three Rabi crops.

Ans- Wheat, spinach and apple.

IV. Short answers questions.

Q. 1. What do seeds disperse?

Ans- Seeds disperse new plants.

Q. 2. Define vegetative reproduction.

Ans: The reproduction by vegetative parts where the stem, roots or leaf of the parent plant can give rise to a new plant. This method is known as vegetative reproduction. It can be either natural or artificial.

Q. 3. What are crops?

Ans: When similar type of plants grows in a particular area during a particular period, they are called crops.

Q. 4. How should we protect crops?

Ans: In order to grow a healthy and a good-quality crop, a farmer must take care of the following:

- Seeds should be protected from diseases by spraying suitable chemicals and only the healthy ones should be sown in the soil.
- Turning over the soil is important as it loosens the soil and irrigation at the correct time prepares the soil for the growth of crops.
- The soil must be treated with rich manure and fertilisers.
- A strong fence must be built to protect the crops from hungry cattle.
- The crops must be sprayed with pesticides and insecticides to protect them from pests and insects Like locusts, grasshoppers, plant-lice, and caterpillars.
- Plant diseases and soil infertility can be prevented with the help of crop rotation.

V. Long answers questions.

Q.1. Explain germination.

Ans- When a seed grows into a seedling, it is called **germination**.

1. The embryo or the baby plant is within the seed. It is protected by a seed coat. The baby plant has baby shoot called as plumule and a baby root called as radical.
2. Right conditions are needed for a seed to grow, when it falls on the ground or is planted. Only a few seeds survive and get favourable conditions for their growth into new plants.
3. The seed leaves store the food for the baby plant. The seed absorbs water.
4. The seed coat also breaks open. The baby plant begins to grow inside the seed. The root appears first, and then the shoot begins to grow.

Q.2. Why is the dispersal of seeds necessary? What are the agents of dispersal?

Ans- Plants cannot move from one place to another because they are fixed to the ground. All plants would find it difficult to survive, if all the new plants were to grow near the parent plant. An overcrowded place would not have enough sunlight, food, water and space for every plant to grow. So the baby plants need to move away from the parent plant. The process takes place by the dispersal of seeds with the help of natural agents. These are water, wind, and animals, humans and seed explosion.

Q.3. What are the favourable conditions for germination?

Ans- Conditions for Germination of Seed

- Appropriate amount of warmth and sunlight.
- Rich and fertile soil.
- Appropriate amount of water.
- Appropriate amount of fresh air.

Q.4. What are the types of artificial vegetative propagation? Explain them.

Ans- The man-made process of growing new plants from the parent plant using its different parts is known as Artificial Vegetative Reproduction.

- **By Layering:** In this method of growing new plants, the lower branches of the parent plants are bent and buried under the soil. The tip is kept above the soil. After a few days, new roots develop. These new branches are cut from the parent plant and transferred to another place.

Example: jasmine.

- **By Stem Cutting:** In some plants, pieces of the stem can grow into new plants. These stem pieces have buds on them and are called stem cuttings. A stem cutting is put into the soil and a few days later, a new plant grows from it.

Examples: rose, hibiscus, coleus and sugarcane.

- **Grafting:** It is also a man-made way of growing plants in which two different parts of a plant are tied together with a wet cloth. The upper part is called scion while the lower part is called stock. The stock and scion must always belong to the same species. New shoots develop from the scion in 2-3 weeks. **Example:** Rose, mangoes and guava

Q.5. Explain the difference between Kharif and Rabi crops.

Ans- Rabi Crops-Crops that grow well in winters are called Rabi crops.

For example-gram, wheat, and vegetables like spinach, carrot, radish and turnip. Fruits like apple, banana and berry also grow well in winter.

Kharif crops-Crops that grow well in summers are called Kharif crops.

For example- rice, jowar,bajra, maize, soyabean, groundnut, pulses and vegetables like brinjal, beans, lady's finger and pumpkin. Fruits like peach, mango, plum, litchi and melon also grow well in summers.

Post-activity-

Draw the diagram of germination.

Subject Teacher

H.O.D.

Coordinator

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