Growing Plant

Question: Define germination.

Answer: The process by which a seed forms into a new plant is called germination.

Question: Name any three things that the seed requires to germinate.

Answer: The three things that seed requires to germinate are -

- 1. Air
- 2. Water
- 3. Warmth.

Question: Why do plants scatter their seeds?

Answer: Plants scatter their seeds in order to insure that they don't grow too close to each other.

Question: Name any three parts of the plant other than the seed from which a new plant can grow?

Answer: The three plants other than the seed from which a new plant can grow are

- 1. roots
- 2. Stems
- 3. Leaves.

Question: What is step farming?

Answer: In hilly areas, people grow crops by cutting steps into the mountains known as step farming.

Question: Describe the process of germination.

Answer: The process by which a seed grows into a new plant is called germination.

- 1. When the seed gets all the necessary things like air, water, warmth, space and nutrients from the soil the process of germination starts.
- 2. During the early stages, the seeds will get food from the cotyledons.
- 3. The seed coat will break and a new plant will emerge out of the seed.
- 4. When the plant will develop a root system it will absorb water and nutrients from the soil.
- 5. The shoot system of the plant will develop and now the leaves will start preparing food for the plant therefore the cotyledons will shrink and disappear.

Question: Define dispersal. Describe the different ways of seed dispersal. Answer: The process by which seeds are scattered away from the mother plant is called dispersal. The different ways by which the seeds can be dispersed are –

- 1. **By wind –** The seeds that are light in weight have wing-like structure or hair-like structure can be easily carried away by the wind from one place to another. For e.g. cottonseed.
- 2. **By water –** Seeds that have a fibrous covering that can bloat on the water can be dispersed by this method. For e.g. coconut and lotus.
- 3. **By animals –** seeds that have hooks or spines can stick on the body of the animals and so can be carried away from one place to another by the animals. For e.g. cocklebur.
- 4. **By explosion –** Fruits of some of the plants burst open when they are ripe and scatter the seed in all directions. For e.g. poppy, pea and beans.

Question: Explain, with examples, the different parts of a plant from which new plants can grow.

Answer: The different parts of the plants from which a new plant can grow are the following –

- 1. **From roots –** Some plants store food in their roots, so the new plants can grow from the roots of these plants. For e.g. carrot, radish, beetroot, turnip, dahlia.
- 2. **From stem –** Some plants like potatoes have buds called eyes on their surface. A bud can grow into a new plant. Some plants rose, hibiscus and money plant can grow a new plant with their stem cuttings.
- 3. **From leaves –** Some leaves like bryophyllum have buds on their margins when these leaves fall down on moist soil the bud can grow into a new plant.

Question: Write differences between rabi and Kharif crops with examples. Answer:

Rabi	Kharif
1. Crops grown from	1. Crop grown from June to
November to April are called	October are known as Kharif
rabi crops.	crops.

2. These crops do not depend on the monsoon rains.	2. These crops depend largely on the monsoon rains.
3. E.g. – Wheat and legumes.	3. E.g. – rice and maize.

Question: What is the importance of cotyledons for a plant?

Answer: Cotyledons provide food for the baby plant in the early stages of germination.

Question: Define agriculture. Write different stages of agriculture.

Answer: The practice of growing plants on a large scale for food or other purposes is called agriculture. The different stages are –

- 1. The field is ploughed.
- 2. Manure is added to the soil.
- 3. Seeds are sown.
- 4. The crops are irrigated (watered).
- 5. The crops are sprayed with chemicals called pesticides to protect them from pests.
- 6. The crops are harvested.

Question: What is vegetative reproduction?

Answer: The process in which new plants are grown from the parts of the plant other than seed is called vegetative reproduction.