

Subject- EVS

Class- V

Topic- Seed becomes a plant

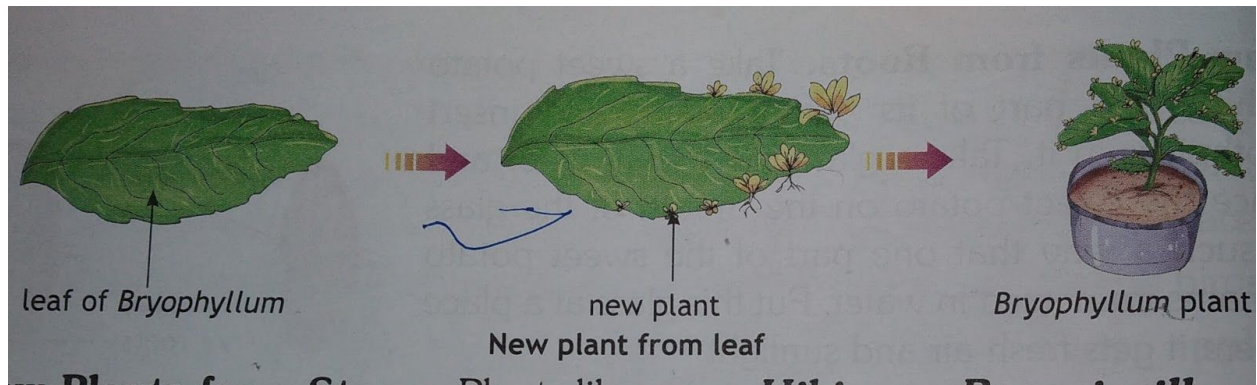
Learn and write the following question answers-

Q1. Explain the necessary conditions required for the germination of seeds.

A1. Water, air and sunlight are the necessary conditions for the germination of seeds.

Q2. Name a plant which grows without seed, and draw a diagram of it.

A2. A plant which grows without seed is Bryophyllum.



(Draw this diagram from pg. no. 60)

Q3. What is dispersal?

A3. The scattering of seeds away from the parent plant is called dispersal of seeds.

Q4. How do humans help in dispersal of seeds?

A4. Human beings help in the dispersal of seeds in the following ways—

(a) Human beings eat juicy and fleshy fruits and throw away their seeds.

For example, mango, apple, watermelon.

(b) Seeds stick to the clothes of humans and are carried away to different places. For example, tiger nail, spear grass.

Q5. Write the names of 5 plants which came to India from foreign countries.

A5. Lantana, Parthenium, tea, coffee and lady's finger are the plants which came to India from foreign countries.

Q6. Name any 4 agents of dispersal.

A6. The agents of dispersal are wind, water, birds and insects.

Q7. Name any 2 plants each that reproduce through:

(A) Roots

(B) Underground stem

(C) Spores

A7. The plants that reproduce through

(a) **Roots:** Sweet potato, dahlia.

(b) **Underground stem:** Potato, ginger.

(c) **Spores:** Ferns, mosses.

Q8. How do following help in dispersal of seeds?

(A) Wind

(B) Water

(C) Animals

A8. (a) **Wind:** Some seeds are light and have special tufts of hair around them or wings attached to them, that help them to be carried away by the wind from one place to another. For example, cotton, Dandelion, madar seeds have tufts of hair around them which help them in dispersal while seeds of hiptage, maple and sycamore have wings attached to them.

(b) **Water:** Water helps in the dispersal of seeds of plants living in water or a place near it. For example, the lotus fruit has a spongy part and the coconut fruit has a thick fibrous coat that enables them to float on water and to travel with the water to far off places.

(c) **Animals:** Seeds are also dispersed by animals including humans and birds. For example:

(i) Humans and animals eat juicy and fleshy fruits like mango, apple and watermelon and throw away their seeds.

(ii) Seeds of plants like Xanthium, tiger nail and spear grass have hooks or spines that stick to the hairy skin of animals or clothes of humans and are carried away.

(iii) Some seeds eaten by plants and animals have a tough seed coat due to which they do not get digested. When birds and other animals swallow them, they come out intact in their waste material (droppings) and are hence dispersed to different places.

Q9. Name the edible part (root, stem, leaves or fruits) of the following-

A9. The edible parts of the following are:

(a) carrot : root

(b) potato : underground stem

(c) tomato : fruit

(d) spinach : leaves

(e) grapes : fruit

(f) lettuce : leaves

(g) onion : underground stem

(h) radish: root

(i) ginger: underground stem

Q10. Name the plants whose seeds are dispersed by wind, water, animals or explosion of fruits.

A10. (a) pea : explosion of fruits

(b) mango : animals

(c) coconut : water

(d) cotton : wind

(e) balsam : explosion of fruits

(f) lotus : water

(g) watermelon : animals

(h) dandelion : wind

Q11. Why do plants need to scatter seeds?

A11. Plants cannot move on their own. If seeds of a plant will fall at the same place, then they will not get sufficient amount of nutrients for their growth. So, nature has developed ways to scatter their seeds away from the parent plants to produce plants of their own kind.

Q12. What is vegetative propagation?

A12. The method of obtaining new plants from the leaves, stems and roots of the parent plant is called vegetative propagation.

Q13. How do the following plants grow by vegetative propagation?

(A) Potato

(B) Bryophyllum

(C) Rose

A13.(a)**Potato**: Potato have buds on their surface. Under suitable conditions, each bud grows into a new plant. The buds of potato are called eyes. Any piece of a potato with an eye can grow into a new plant, when provided suitable conditions.

(b)**Bryophyllum**: The Bryophyllum plant has buds on the edges (margins) of its leaves. When these buds fall on moist soil, they produce new plants.

(c)**Rose**: Plants like rose have buds on their stem. The small cuttings of these plants are called stem cuttings. When we plant a stem cutting having one or two buds into the soil, it grows into a new plant in a few days.

Q14. How will you obtain a new plant from a sweet potato?

A14. **Aim**: To obtain a new plant from a sweet potato.

Method:

(a) Take a sweet potato (or a part of its parent plant).

(b) Insert toothpicks in it on all the four sides.

(c) Take a glass filled with water and place the sweet potato on the mouth of the glass.

(d) The lower part of the sweet potato should remain immersed in water.

(d) Keep this glass at a place where it gets fresh air and sunlight.

Q15. We must take a pledge to plant two trees every time we cut down a tree. Why?

A15. We must pledge to plant two trees every time we cut down a tree because of the following reasons—

(a) Cutting of trees leads to soil erosion that causes loss of crops. This results in the shortage of food causing starvation of people.

(b) Cutting of trees leads to deforestation that results in the increase in air pollution which thereby, causes global warming. Greenhouse gases mixed with pollution depletes the ozone layer.

(c) Global warming has led to melting of glaciers which has increased the level of water in the oceans. It is a serious threat to the human habitation.

HOMEWORK

Draw a neat and clean diagram of "**Germination of a seed**". Colour and label it.