

## **CHAPTER – 5**

### **SEEDS AND SEEDS**

#### **2MARK QUESTIONS**

**1. What things do you eat after sprouting? How are they sprouted? How much time does it take?**

**ANSWER:**

After sprouting, we can eat items like chana, moong, etc. We can sprout them by soaking them in water and then by wrapping them in wet cloth so that they get proper water and air. Chana takes around 36-48 hours to sprout, and moong takes around 24-36 hours.

**2. Has the doctor or someone you know ever told you to eat sprouts? Why?**

**ANSWER:**

Yes, the doctor has advised me to eat sprouts, as it is good for my health.

**3. Why did Gopal's mother tie the chana in a damp cloth?**

**ANSWER:**

Gopal's mother tied the chana in a damp cloth so that seeds could get proper air and water to sprout.

**4. How long did it take for the plant to come out from the soil?**

**ANSWER:**

The plant took almost a week to come out of the soil.

**5. What was the difference in the height of the plant on the first and second days?**

**ANSWER:**

The height of the plant from the first day to the second day has increased by half a centimeter.

**6. Did new leaves come out of the plant every day?**

**ANSWER:**

Yes, new leaves came out of the plant every day.

**7. Was there any change in the stem of the plant?**

**ANSWER:**

Yes, the stem became thicker and stronger each day passed by.

**8. What would happen if the plants do not get water?**

**ANSWER:**

If the plants do not get water, then they will get dried up.

**9. What is inside the seed?**

**ANSWER:**

Inside the seeds, there exist cotyledons and embryos.

**10. How does a big plant grow from a tiny seed?**

**ANSWER:**

The seeds, by absorbing water and nutrients from the soil, grows to be big plant.

**11. Think what would happen, if seeds did not spread and remained in one place only.**

**ANSWER:**

If seeds did not spread and remain in one place, they would fall under their parent tree so that they would not get enough sunlight and water. Hence, the plant will not grow properly, and it might die.

**12. Make a list of the different ways by which seeds are spread.**

**ANSWER:**

Seeds are spread by water, wind, animals, birds, humans, etc.

## **5 MARK QUESTIONS**

**1. What all was grown in India long ago? Were mangoes and bananas grown here? What came from other countries? Imagine food without potatoes or tomatoes!**

**ANSWER:**

Long ago in India, spinach, radish, mango, orange, etc., were grown. Yes, mangoes and bananas were grown here. From other countries, we got items like tomatoes, potatoes, coffee beans, cabbage, etc. It would be difficult to cook food without potatoes and tomatoes, and it would be tasteless.

**2. Make list of**

**Q1. Seeds that are used as spices in your home.**

**ANSWER:**

Seeds that are used as spices at home are mustard, cumin, aniseed, etc.

**Q2. Seeds of vegetables.**

**ANSWER:**

Seeds of vegetables are tomato, lady's finger, brinjal, etc.

**Q3. Seeds of fruits.**

**ANSWER:**

Seeds of fruits are oranges, apples, grapes, etc.

**Q4. Light seeds**

**ANSWER:**

Light seeds are cumin, aniseed, etc.

**Q5. Seeds which are flat.**

**ANSWER:**

Seeds which are flat are cumin, aniseed, sesame, rajma, etc.

**Q6. Make more groups. How many groups of seeds did you make?**

**ANSWER:**

More groups of seeds are edible seeds, small seeds, big seeds, seeds used as spices, heavy seeds, lightweight seeds, and seeds which produce oil. I could make 7 groups.

**3. Explain the concept of seeds being great travelers, and provide an example mentioned in the text.**

**ANSWER:**

Seeds are great travelers as they can spread to different places. An example is soyabean pods bursting, throwing out seeds, which can be heard making a sound.

**4. How does the concept of seed travel relate to human beings, as mentioned in the text?**

**ANSWER:**

Humans also contribute to seed travel by unknowingly carrying seeds from one place to another. They bring seeds of plants they find beautiful or useful, leading to the spread of those plants.

**5. What are some ways seeds are spread, and why is human involvement significant in seed dispersal?**

**ANSWER:**

Seeds are spread by flying, sticking to animals or clothing, or carried by humans. Human involvement is significant as it influences the intentional or unintentional transportation of seeds, contributing to the spread of plant species.

**6. How did chillies come to India, and what does this example illustrate about the spread of seeds?**

**ANSWER:**

Chillies came to India from South America through traders. This example illustrates how seeds, in this case, chilli seeds, were brought by humans to new regions, influencing food culture.

**7. Explain the cultural aspect highlighted in the poem "Did you know this?" in relation to the origin of plants.**

**ANSWER:**

The poem emphasizes the cultural exchange of plants across countries, symbolizing the diversity in Indian cuisine influenced by the introduction of various plants from different regions. It highlights how food culture evolves through the introduction of new ingredients.



**8. Describe what happened when Gopal soaked more chana than instructed by his mother.**

**ANSWER:**

Gopal soaked more chana than instructed, leading to an overflow in the vessel. His mother decided to cook half and let the other half sprout, as per the doctor's advice for his aunt.

**9. Explain the process of sprouting chana and its health benefits, as mentioned in the story.**

**ANSWER:**

Sprouting chana involves soaking the seeds, tying half in a damp cloth, and letting them sprout. This process enhances the nutritional value, making it a healthier option, as advised by the doctor.

## **FILL IN THE BLANKS**

1. The process of soaking seeds in water to initiate germination is called \_\_\_\_\_. (**soaking**)
2. The doctor advised Gopal's aunt to eat \_\_\_\_\_ for health benefits. (**sprouts**)
3. Velcro, a material with tiny hooks, was inspired by the sticking seeds observed by \_\_\_\_\_. (**George Mestral**)
4. Some plants spread their seeds by bursting open, such as the pods of \_\_\_\_\_. (**soybean**)
5. Chillies were brought to India by traders from \_\_\_\_\_. (**South America**)
6. Seeds of fruits like mangoes and oranges were brought to India from different countries, adding diversity to \_\_\_\_\_. (**Indian Cuisine**)
7. Seeds of the Pitcher plant trap insects cleverly, using a pitcher-like shape and a special \_\_\_\_\_. (**smell**)

8. Human beings contribute to seed travel by unknowingly carrying seeds, influencing the spread of \_\_\_\_\_. **(plant species)**

9. The outer protective covering of a seed is called the \_\_\_\_\_. **(seed coat)**

10. The seeds of the soybean burst with a sound, demonstrating their ability to \_\_\_\_\_. **(travel and spread)**

## **MULTIPLE CHOICE QUESTIONS**

**1. Why did Gopal's mother ask him to soak chana before his mausi's family visit?**

- a) To make chana soup
- b) To prepare a meal for guests
- c) To grow chana plants
- d) To feed the birds

**Answer:** b) To prepare a meal for guests

**2. What happened when Gopal soaked more chana than instructed by his mother?**

- a) The chana remained dry
- b) The chana sprouted immediately
- c) The vessel overflowed
- d) The chana turned green

**Answer:** c) The vessel overflowed

**3. Why did Gopal's mother decide to cook half of the soaked chana and let the other half sprout?**

- a) To experiment with different recipes
- b) To follow a doctor's advice
- c) To save the chana for later
- d) To sell the sprouted chana

**Answer:** b) To follow a doctor's advice

**4. What did the teacher instruct the students to do with chana, cotton wool, and water?**

- a) Cook a chana dish
- b) Observe the sprouting process
- c) Make a chana craft
- d) Plant chana in the garden

**Answer:** b) Observe the sprouting process

**5. How did George Mestral come up with the idea of Velcro?**

- a) After a walk with his dog and observing seeds sticking to clothes
- b) By studying plants in the Amazon rainforest
- c) During a visit to a textile factory
- d) Inspired by a science fiction novel

**Answer:** a) After a walk with his dog and observing seeds sticking to clothes

**6. What is the significance of soybean pods bursting and making a sound?**

- a) It signals the arrival of birds
- b) It indicates the end of the soybean season
- c) It demonstrates the seeds' ability to spread
- d) It attracts insects

**Answer:** c) It demonstrates the seeds' ability to spread

**7. How do humans contribute to seed travel, as mentioned in the text?**

- a) By eating seeds
- b) By carrying seeds unintentionally
- c) By preventing seed dispersal
- d) By planting seeds in gardens

**Answer:** b) By carrying seeds unintentionally

**8. What is the significance of the poem "Did you know this?" about the origin of plants?**

- a) It provides gardening tips
- b) It highlights cultural exchange through plant introduction
- c) It discusses the poet's favorite plants
- d) It explains seed anatomy

**Answer:** b) It highlights cultural exchange through plant introduction

**9. How did chilies come to India, according to the text?**

- a) By natural migration
- b) Through traders from South America
- c) By birds carrying seeds
- d) By ocean currents

**Answer:** b) Through traders from South America

**10. What does the poem "Did you know this?" emphasize about Indian cuisine?**

- a) The simplicity of ingredients
- b) The dominance of local spices
- c) The diversity influenced by the introduction of plants from different regions
- d) The use of traditional cooking methods

**Answer:** c) The diversity influenced by the introduction of plants from different regions



## **SUMMARY**

The story "Seeds and Seeds" revolves around Gopal, who eagerly anticipates his mausi's family visit. His mother instructs him to soak chana for a meal. However, Gopal, thinking it might not be enough, soaks extra chana, leading to an overflow. His mother decides to cook half and let the other half sprout, following a doctor's advice. The narrative introduces the concept of sprouting seeds for nutritional benefits.

George Mestral's inspiration for Velcro from seeds sticking to clothes is discussed. The story emphasizes how seeds are travelers, spreading through various means, including human involvement.

The narrative explores seed dispersal methods, such as flying seeds and those sticking to animals or clothes. The text highlights human contributions to seed travel and introduces the concept of introducing plants to new regions, as illustrated by the spread of chilies from South America to India. The poem "Did you know this?" adds a cultural dimension, emphasizing the diverse origins of plants in Indian cuisine.

In conclusion, the story intertwines practical lessons on seed sprouting and dispersal with cultural aspects, illustrating the interconnectedness of nature and human practices in the context of food and plants.