# **Chapter 12: Food for All**

### CAN YOU TELL? [PAGE 58]

#### Can you tell? | Q 1 | Page 58

Which vegetables do we get around the time of Diwali? Which fruits? Which grains?

#### SOLUTION

- 1. **Vegetables that we get around the time of Diwali**: Spiny gourd, (Kantoli), Ridge gourd (Shiralt), Ghosali, Kohala
- 2. Fruits that we get around the time of Diwali: Sweet lime, Oranges, Apples, Musk melons
- 3. Grains that we get around the time of Diwali: Ragi, Rice.

#### Can you tell? | Q 2 | Page 58

What are the seasons for jowar, bajra, rice, mangoes, oranges, and jackfruit?

## SOLUTION

Jowar and Bajra: During winter

Mango and Jackfruit: In summer

Rice: In the monsoon/rainy season

Oranges: Beginning of winter

Can you tell? | Q 3 | Page 58

Which parts of plants do we use as food?

## SOLUTION

Roots: Carrot, Beetroot, Radish, Sweet Potato

**Stem**: Potato, Elephant's foot (Suran), Ginger, Onion

Leaves: Arum, Colocasia, Cabbage, All leafy green vegetable

Fruits: Pumpkin, Tamarind, Bitter gourd, Snake gourd

**Flower**: Cauliflower, Banana flower **Seeds**: Beans, Lentil, Cowpea, Gram

## CAN YOU TELL? [PAGE 58]

## Can you tell? | Q 1 | Page 58

Which is the season for growing rice?

#### SOLUTION

Rice is grown in the Kharif season.

### FIND OUT. [PAGE 59]

#### Find out. | Q 1 | Page 59

Names of two varieties of improved seeds of Jowar.

#### SOLUTION

CSH4 and SSV-84, Phule Yashoda, Phule Maull, Swati are the names of improved seed varieties of Jowar:

#### Find out. | Q 2 | Page 59

Who helped the farmer to drive the 'mot'?

#### SOLUTION

A pair of oxen help the farmer to drive the 'mot'.

#### Find out. | Q 3 | Page 59

How is groundwater lifted these days?

#### SOLUTION

The groundwater was taken out with the help of hand pumps and by digging bore wells. Even now at many places, hand pumps are used. However, in the majority of cases, now the electric motor is fitted to draw water from the underground level.

## USE YOUR BRAIN POWER! [PAGE 61]

### Use your brain power! | Q 1 | Page 61

What is the advantage of storing grain in wattle and daub baskets?

## SOLUTION

Wattle and daub baskets have holes on their surface. This keeps air circulating around the stored grains. The grains do not become moist and thus do not catch fungus. Moreover, there is less chance of insect attacks due to dry and airy conditions. The grains stored like this can remain in better condition for a longer period of time. Therefore, grains are stored in wattle and daub baskets.

## EXERCISES [PAGE 63]

#### Exercises | Q 1 | Page 63

#### What's the solution?

The plant in the pot is not growing well.

- 1. Keep the potted plant in such a way so that it gets maximum sunlight.
- 2. Add manure and organic fertilizer to the pot. If chemical fertilizers are to be added, ask the expert about the dosage.
- 3. Water the plant daily and preferably in the morning.
- 4. Loosen the soil near the roots.
- 5. Trim the plant occasionally to enhance the growth.
- 6. Take care of the plant so that parasitic pests and insects do not harm the plant. If all the above care is taken the plant in the pot will start growing well again.

#### Exercises | Q 2 | Page 63

#### **Use your brain power!**

What is the purpose of storing food grain in our house?

#### SOLUTION

- 1. In order to avoid daily commuting to the market. we store the food grains in our house.
- 2. Some foodstuff is seasonal. It is available only during certain seasons. This needs to be bought and suitably preserved for storage.
- 3. Sometimes the shops and markets may be closed causing inconvenience at the last minute. So we need to store the foodstuff in our house.
- 4. Sometimes guests may also drop in and we may need more supplies.
- 5. There may be parties, celebrations, or similar occasions when we need more foodstuff.'
- 6. Some food grains may be sold only at a particular period of time. So that we need to bring them home and store.

#### Exercises | Q 3. (a) | Page 63

Find and correct the incorrect statement.

There is only one method of farming.

- 1. Correct
- 2. Incorrect

## SOLUTION

This statement is incorrect.

There are multiple methods of farming.

### Exercises | Q 3. (b) | Page 63

Find and correct the incorrect statement.

India is an agricultural country.

- 1. Correct
- 2. Incorrect

## SOLUTION

This statement is correct.

India is an agricultural country.

#### Exercises | Q 3. (c) | Page 63

#### Find and correct the incorrect statement.

Use of improved seeds does not lead to higher yields.

- 1. Correct
- 2. Incorrect

## SOLUTION

This statement is incorrect.

Use of improved seeds leads to higher yields.

#### Exercises | Q 4. (a) | Page 63

#### Answer the following question.

What are the advantages of using improved seeds?

### SOLUTION

- 1. Improved seeds have a higher yield.
- 2. These seeds resist pest attacks.
- 3. They grow well and become ripe for harvest in a shorter period of time.
- 4. Some seeds can give a high yield in low water supply too.

## Exercises | Q 4. (b) | Page 63

#### Answer the following question.

Which are the modern methods of irrigation? What are their advantages?

## SOLUTION

- 1. Drip irrigation and sprinkle irrigation are modern methods of irrigation.
- 2. Due to modern methods of irrigation, the roots of the crops get enough water.
- 3. One can save a lot of water through these methods.
- 4. In modern methods of irrigation, full use is made of the available water.
- 5. There is a danger of land becoming saline and fallow when there is overwatering. This can be avoided due to modern irrigation methods.

#### Exercises | Q 4. (c) | Page 63

#### Answer the following question.

Describe the 'drip irrigation' method.

- 1. In the Drip irrigation method, pipes with holes are used for giving water to the plants.
- 2. The only required amount of water drips near the plants in this method.

3. The full use of reusable water can be done by the drip irrigation method.

#### Exercises | Q 4. (d) | Page 63

#### Answer the following question.

What are the reasons due to which growing crops are damaged?

### SOLUTION

Diseases and pest attacks can damage crops in the fields.

#### Exercises | Q 4. (e) | Page 63

### Answer the following question.

What is done to avoid the damage to crops?

#### SOLUTION

- 1. To avoid damage to the crops, modern irrigation methods are used to water the crops.
- 2. To reduce the pest and disease attacks, the crops are sprayed with insecticides and pesticides.
- 3. Seeds used are also of improved quality and they are rubbed with certain chemicals before sowing.
- 4. Proper amounts of fertilizers are used to enhance the growth of the crops.

## Exercises | Q 4. (f) | Page 63

#### Answer the following question.

What causes the fertility of the soil to diminish?

## SOLUTION

The overuse of chemical fertilizers leads to the accumulation of excessive chemicals in soil. This reduces the fertility of the soil. Overwatering also turns the soil saline and fallow.

## Exercises | Q 4. (g) | Page 63

#### Answer the following question.

What changes has modern technology brought about in the methods of farming?

- 1. Modern technology of agriculture uses improved seeds that give higher yield.
- Modern methods of irrigation such as drip irrigation and sprinkle irrigation are used.
- 3. Organic fertilizers and manures are used to increase the fertility and productivity of the soil.
- 4. Pesticides and insecticides are used to protect the crops against diseases and pest attacks.

5. Through agricultural assistance programmes, farmers are given information and weather forecasts. All these changes have brought about a better yield of farm produce.

#### Exercises | Q 4. (h) | Page 63

#### Answer the following question.

What methods are used to preserve foodgrain?

#### SOLUTION

#### In order to preserve the stored food grains the following methods are used:

- 1. The grain is dried well in the sun and stored in sacks.
- 2. The chemicals are sprayed on the places where the sacks are stacked.
- 3. Neem leaves are mixed with the grain to avoid insect attacks.
- 4. Protective chemicals are mixed with the grains. The smell of these chemicals repels the insect pests.
- 5. The place where grains are stored is kept dry and airy to prevent it from catching fungus.

#### Exercises | Q 4. (i) | Page 63

#### Answer the following question.

How is water made available for farming?

## SOLUTION

- 1. In India, most of the agriculture is dependent upon the monsoon.
- 2. Along with this rainwater, water from rivers, lakes, and wells are used for irrigation purposes.
- 3. Dams are built on rivers for holding huge quantities of water.
- 4. Small bunds are also made downstream on the rivers.
- 5. Traditionally, 'mot' and canal water was used for watering the crops.
- 6. Now modern methods or irrigation are used for farming.

### Exercises | Q 5 | Page 63

#### Match the following.

'A' Group	'B' Group
(1) Grain stored in a damp place	(a) Prevents growth of fungus on the grain
(2) Grain stored in dry air	(b) Prevents insect infestation
(3) Adding proper chemicals to the stored grain	(c) Fungus attack

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