#### SUB. - BIOLOGY

#### CHAPTER - 10

#### **Food Production**

# **Objective Type Questions**

# A. Choose the correct option.

1. Which of the following is an example of Kharif crop?

Ans. a. Rice

- 2. Which of the following is the next step in agriculture practices once the seed is sown? Ans. c. Irrigation
- 3. Which of the following is a biennial crop?

Ans. d. Carrot

4. Which of the following is used for cutting crops?

Ans. a. Sickle

5. Who is considered as the father of organic farming?

Ans. a. Sir Albert Howard

## B. Fill in the blanks.

- 1. Kharif crops are grown in **rainy** season.
- 2. **Annual crops** are the ones which complete their life cycle in one year or in one growing season.
- **3.** The process in which mutation is occurred with the help of mutagens is called **mutation breeding.**
- 4. **Rabi** crops are grown during the winter.
- 5. **Fertilisation** involves the use of fertilizers to improve the soil and crops.
- 6. Showing of **rabi** crops takes place at the starting of winter.

## C. Right T for true and F for false statements.

- 1. Seed selection is a very important aspect of agriculture. **T**
- 2. The amount of rainfall required to grow rabi crops is more than the kharif crops.F
- 3. Organic farming degrades the biological activity of the soil. F
- 4. In genetic engineering, a gene is introduced in a plant by the technique of recombinant DNA technology and genetic transformation.**T**
- 5. Horticulture is a branch of agriculture which deals with the study of crop plants.T

# **Subjective Type Questions**

# D. Answer The following questions in short.

- 1. Write about the methods used for crop improvement.
  - Ans. Some methods used for crop improvement are plant introduction, selection, mutation breeding, hybridization, crop rotation, manuring, fertilisation.
- 2. Define organic farming.

Ans. – Organic farming is a practice in which harmful chemicals are either not used at all or used in minimum amounts.

3. What is horticulture?

Ans. Horticulture is the branch of agriculture which focuses on growing plants, vegetables and decorative flowers and plants.

4. What do you understand by green revolution?

Ans. The Green Revolution is defined as a period productivity of global agriculture increased drastically as a result of new advances.

5. Write a short note on organic farming.

Ans. Organic farming is a method of farming in which a land is cultivated and crops are grown with an aim to maintain the fertility of the soil by using organic wastes from plants and animals. Sir Albert Howard is recognised as the father of organic farming.

# E. Answer The following questions in detail.

1. Explain the different types of crops based on growing seasons.

**Ans**. Based on the seasons, all the crops are categorised into two main groups - **Kharif crops and rabi crops**.

**Kharif crops** – The crops which are shown in the rainy season are called kharif crops. The kharif crops are harvested at the end of monsoon season during September. Example - paddy, maize, soya bean, groundnut and cotton.

The kharif crops are sometimes also called summer crops.

**Rabi crops** – The crops grown in the winter season are called Rabi crops. The time period of Rabi crops is generally from October to March. The showing of Rabi crops begins at the beginning of winter. The crops are harvested by March or April. Example – wheat, gram peas, mustard.

2. Write a detailed note about biennials and perennials crops with examples.

Ans. **Biennial crops** are those crops which complete their life cycle in two years or in two growing seasons. They are grown in the first year in which the roots and leaves are produced. Then in the second year they produce flower, fruits and seeds. Examples - Carrot ginger, cabbage etc.

**Perennial Crops** – Perennial crops are the crops that can survive without replanting for several years i.e. they can be harvested several times before replanting is needed. They produce food for many years after a single planting.

Examples – mango, coconut etc.

3. Write a short note on the features of organic farming.

Ans. - Features of organic farming - 1. It helps in protecting the fertility of soil for a longer period of time.

- 2. It helps in maintaining the nitrogen level of soil by the use of legumes and biological nitrogen fixation.
- 3. It helps in protecting the crops from weeds, pests and diseases through crop rotation, natural predators, organic manuring resistant varieties .
- 4. It also helps in conserving the environment and natural habitats of wildlife by reducing the negative impact of farming system on them.