

CROP PRODUCTION AND MANAGEMENT

1. Select the correct word from the following list and fill in the blanks.

float, water, crop, nutrients, preparation

- The same kind of plants grown and cultivated on a large scale at a place is called _____ crop.
- The first step before growing crops is _____ of the soil.
- Damaged seeds would _____ on top of water.
- For growing a _____ sufficient sunlight and water and nutrients from the soil are essential.

2. Match items in column A with those in column B.

column A		column B
i. Kharif crops	()	a) Food for cattle
ii. Rabi crops	()	b) Urea and super phosphate
iii. Chemical fertilisers	()	c) Animal excreta, cow dung, urine and plant waste
iv. Organic manure	()	d) Wheat, gram, pea
		e) Paddy and maize

A. i) e ii) d iii) b iv) c

3. Give two examples of each.

a) Kharif crop

A. a) Kharif crop - Paddy, maize etc.

b) Rabi crop

b) Rabi crop - Wheat, gram etc.

4. Write a paragraph in your own words on each of the following.

a) Preparation of soil

b) Sowing

c) Weeding

d) Threshing

A. a) Preparation of soil:

- The preparation of soil is the first step before growing a crop.
- The preparation of soil is to turn the soil and loosen it which allows the roots to penetrate deep into the soil.
- The loose soil allows the roots to breathe easily even when they go deep into the soil.
- Turning and loosening of soil brings the nutrient-rich soil to the top so that plants can use these nutrients.
- The process of loosening or turning of soil is called tilling or ploughing. This is done by using a plough.

b) Sowing:

- i) Sowing is the most important part of the crop production. It can be done either through traditional tool or seed drill.
- ii) Before sowing, good quality seeds which give a high yield are selected by the farmers.
- iii) During sowing, an appropriate distance between the seeds is important to avoid overcrowding of plants.

c) **Weeding:**

- i) The removal of weeds is called 'Weeding'. Hoe is a simple tool which is used for weeding.
- ii) Weeding is necessary since weeds compete with the crop plants for water, nutrients, space and light.
- iii) Weeding is also done by using certain chemicals called Weedicides. Eg: 2, 4 - D.

d) **Threshing:**

- i) The process of separation of harvested grain seeds from the chaff is called 'Threshing'.
- ii) Now a days, this is carried out with the help of a machine called 'combine' which is in fact a combined harvester and thresher.

5. Explain how fertilisers are different from manures.

A.

Fertilisers	Manures
i) A fertiliser is an inorganic salt.	i) Manure is a natural substance obtained by the decomposition of cattle dung, human waste and plant residues.
ii) A fertiliser is prepared in factories.	ii) Manure is prepared in the fields.
iii) A fertiliser does not provide any humus to the soil.	iii) Manure provides a lot of humus to the soil.
iv) Fertilisers are very rich in plant nutrients like nitrogen, phosphorous and potassium.	iv) Manure is relatively less rich in plant nutrients.

6. What is irrigation? Describe two methods of irrigation which conserve water.

A. Supply of water to crop plants at appropriate intervals is called irrigation.

Two methods of irrigation which help in conservation of water are - Sprinkler system and Drip system.

a) **Sprinkler system:**

- i) This system is more useful on the uneven land, having fewer water supplies.

- ii) In this method, water is supplied using pipes to one or more central locations within the field.
- iii) When water is allowed to flow under high pressure with the help of a pump, it gets sprinkled on the crop plants.
- iv) It is very useful for sandy soil.

b) Drip system:

- i) This is the most efficient method of irrigation where water is delivered at or near the roots of plants, drop by drop.
- ii) This is the best technique for watering fruit plants, gardens and trees.
- iii) This method is important in areas where water availability is poor.

7. If wheat is sown in the kharif season, what would happen? Discuss.

A. i) If wheat is sown in the kharif season (from June to October), then the whole crop might get destroyed because of many factors such as lack of optimum temperature, adaptability, availability of pests etc.

ii) Therefore, wheat crop should not be sown during this season.

8. Explain how soil gets affected by the continuous plantation of crops in a field.

A. i) Plants require nutrients for their proper growth and functioning.

ii) Continuous plantation of crops in a field makes the soil poorer (deficit) in certain nutrients.

iii) As a result, availability of nutrients in the soil decreases.

iv) This reduces the soil fertility and crop yield.

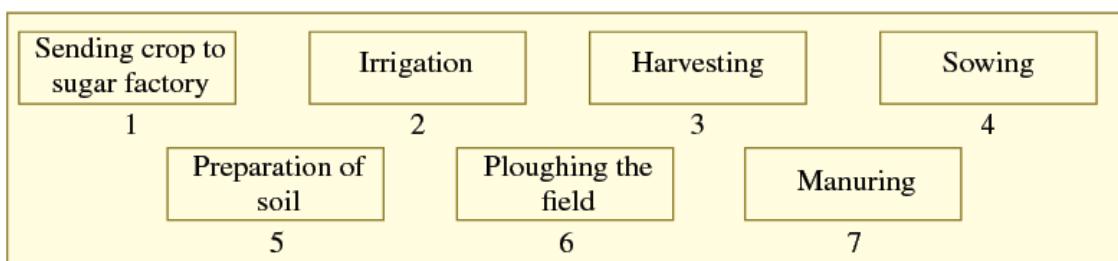
9. What are weeds? How can we control them?

A. Undesirable plants that grow naturally along with crop plants and reduces the crop yield are known as weeds. Eg. *Xanthium*, *Parthenium* etc.

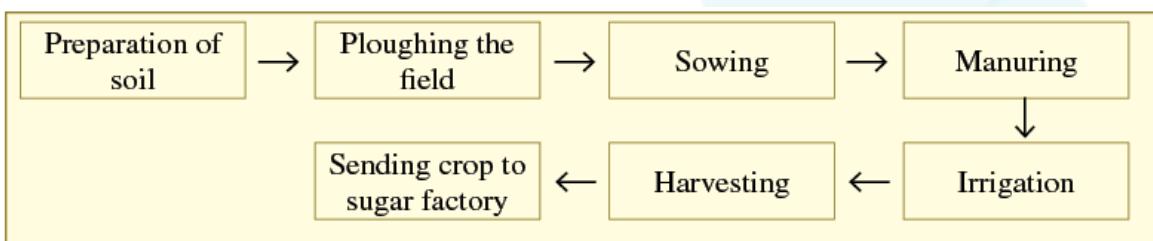
Weeds can be controlled by:

- i) removing them manually. This is done with the help of a Khurpi.
- ii) using certain chemicals called weedicides like 2, 4 - Dichlorophenoxy acetic acid.
- iii) crop rotation method.

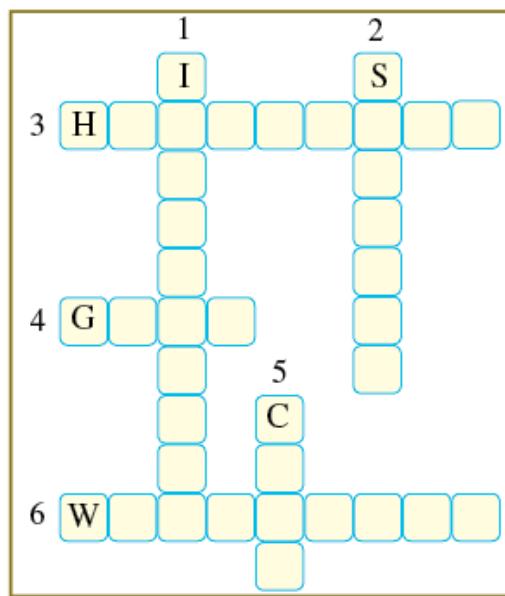
10. Arrange the following boxes in proper order to make a flowchart of sugarcane crop production.



A. Flowchart of sugarcane crop production:



11. Complete the following word puzzle with the help of clues given below.



Down:

1. Providing water to the crops.
2. Keeping crop grains for a long time under proper conditions.
5. Certain plants of the same kind grown on a large scale.

Across:

3. A machine used for cutting the matured crop.
4. A rabi crop that is also one of the pulses.
6. A process of separating the grain from chaff.

A. **Down**

1. IRRIGATION	3. HARVESTER
2. STORAGE	4. GRAM
5. CROP	6. WINNOWING

Across