

5. Explain how fertilisers are different from manure. Answer:

Fertiliser	Manure
Fertilisers are commercially available plant nutrients.	Manure is a natural substance prepared by the decomposition of animal excreta and plant wastes.
They can be organic or inorganic in nature.	Manure is known to have a large quantity of organic materials and very little amount of plant nutrients.
They ensure healthy growth and development of plants by providing them with nitrogen, phosphorus, potassium, etc.	They help in enriching the soil with organic matter and nutrients.
The addition of fertilisers to the soil requires special guidelines such as dose time, post addition precautions, etc., to be followed.	The addition of manure does not require any special guidelines.
A fertiliser does not provide any humus to the soil.	Manure provides humus to the soil and increases soil fertility.
Its excessive use causes water pollution. It cannot replenish organic matter of soil.	It protects the environment and helps in recycling farm waste.

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

Answer:

Supply of water to crops at appropriate intercals is called irrigation. The time and frequency of irrigation varies according to different seasons, crops, and soil types.

Two methods of irrigation which help in conservation of water are:

• Sprinkler system: This system is more useful on uneven land, having fewer water supplies. In this method, water is supplied using pipes to one or more central locations within the field. When water is allowed to flow under high pressure with the

- help of a pump, it gets sprinkled on the crops.
- Drip system: In this system, water is delivered at or near the roots of plants, drop by drop. This is the most efficient method of irrigation as there is no wastage of water at all. This method is important in areas where water availability is poor.
- 7. If wheat is sown in the kharif season, what would happen? Discuss.

Answer:

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. Kharif season includes the rainy season, which is not favourable for the growth of wheat crop. 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.

Answer:

If continuous plantation of crops is done in the fields then the soil will become poor in necessary nutrients like nitrogen, phosphorus, potassium, etc. Plants require nutrients for their proper growth and functioning. When a farmer continues to grow crops one after the other, then all nutrients available in the soil reduce and the crop yield decreases automatically.

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

Weeds are unwanted wild plants that grow in the field. Weeds compete with the crop for nutrients, light, and space. As a result, crop plants get lesser nutrients, light, and space for their development.

Some important weeding methods are:

- Weeds can be controlled using weedicides. It is a chemical, which is sprayed in the fields to kill all available weeds.
 Weedicides are not harmful to crops.
- Tilling before sowing of crops also helps in removing weeds. Tilling uproots the weeds. The best time for the removal of weeds is before they produce flowers and seeds.
- The manual method of removing weeds is with the help of a khurpi. It involves regular uprooting or cutting of weeds close to the ground.

