

Board –CBSE

Class –8th

Topic – Crop Production and Management

1. Explain Rabi and Kharif crops.

Ans. Kharif Crops:

(i) The crops which are sown in the rainy season are called Kharif crops. The rainy season in India is generally from June to September. Paddy, maize, soya bean, groundnut, cotton, etc., are Kharif crops.

(ii) Rabi Crops: The crops grown in the winter season are called rabi crops. Their time period is generally from October to March. Examples of rabi crops are wheat, gram, pea, mustard, and linseed. Besides these, pulses and vegetables are grown during summer in many places.

2. Explain sowing.

Ans. Sowing is the most important part of crop production as it decides the final yield. Good quality seeds that are clear and healthy are selected by the farmers to get a high yield. Good seeds can be separated from damaged ones by putting them into water. Damaged seeds are hollow and float on the water while good quality, healthy seeds settle at the bottom. There are two types of sowing tools Traditional Tool is a funnel-shaped tool that is filled with seeds, while sowing, seeds are passed down through pipes having sharp ends. The ends are sharp as they pierce into the soil and put the seeds their Seed Drill is the modern-day tool for sowing seeds & is used with the help of tractors. This tool has an edge over the traditional tool as it sows the seeds uniformly at proper distances & depths. It also covers the seeds with soil after sowing which prevents damage caused by birds. Seed Drill saves time & labor

3. Differentiate between manure and fertilizers

Ans.

MANURE	FERTILISERS
It is the organic matter which replenishes the soil with nutrients.	These are chemical substances which maintain the soil fertility by adding required minerals to the soil.
It is clean and does not pollute the soil.	Overuse may lead to toxicity and reduction of soil fertility.

Increases the water holding capacity of the soil.	Easy to use as many of them are easily soluble in water.
Provides favourable conditions for growth of microbes.	These are nutrient specific and add nitrates, phosphorous and potassium to the soil.
Preparation requires some period of time.	Can be easily prepared in large quantities.
Storage is complicated.	Can be easily stored if kept away from the moisture.

4. What is weeding?

Ans. The process of removal of waste plants competing with crop plants is called as weeding. Weeds compete with crops in obtaining water, sunlight, and nutrients.

5. Explain the Controlling method for weed.

Ans. Controlling methods for weeds:

Weeds can be tilled along with the soil to kill them. Tilling uproots the weeds and they are mixed with the soil.

Weeds are removed manually by using harrow before they produce flowers and seeds.

Weeds can also be controlled by using chemicals called weedicides. Weedicides are poisonous to humans.

6. Explain threshing.

Ans. When the crop is harvested; it is cut along with the stalks. They are then separated and the grains are removed. This process of separation of grains from the chaff is called 'Threshing'. This whole process is carried out with a machine called 'Combine' which is in fact a combined harvester & thresher.

7. What is irrigation? Describe two methods of irrigation that conserve water.

Ans. Watering the crops in the fields is called 'irrigation'. Irrigation is done at different intervals. Irrigation should be done in a way in which water does not get wasted. Different sources of irrigation are like- wells, tube-wells, ponds, rivers. Two such methods which conserve water are:

(i) Sprinklers: Sprinklers work like fountains. Long perpendicular pipes having rotating nozzles on the top are joined to the main pipelines at regular distances. When water is supplied, it comes

out of these rotating nozzles which sprinkle water in all directions. The limited outflow of water controls the wastage of water. This method is more suitable for uneven and sandy soil.

(ii) Drip System: This system allows the water to flow drop by drop at the roots of the plants. It contains the main pipe which has further lateral pipes containing small nozzles for the outflow of the water. Nozzles are such placed that they throw water at the roots of the plants, which saves water from flowing around uselessly. This technique is best suited for watering fruit plants, gardens, and trees where the availability of water is poor.

8. If wheat is sown in Kharif season, what would happen? Discuss.

Ans. If wheat is grown in the Kharif season, it would not grow as they don't need much water to grow. The seeds would get destroyed in excess water due to the rainy season.

9. Explain how soils get affected by the continuous plantation of crops in a field.

Ans. Continuous plantation of crops drains off the nutrients of the soil. It leaves the land infertile and unable to bear a crop. It does not give any time to the soil to replenish the absorbed nutrients by the crops, thus unable to sustain any further healthy and good crop.

10. Why does every living organism need food?

Ans. Every living organism needs food to grow and perform various other activities and body functions.

11. What are crumbs?

Ans. Crumbs are big pieces of soil present in fields, which require tilling.

12. Name any two important fertilizers.

Ans. Urea, NPK (Nitrogen, Phosphorus, Potassium).

13. Write the names of various agricultural practices undertaken to produce a crop.

Ans. Following agricultural practices are performed to produce the crop:

Soil Preparation, Sowing, adding manure and fertilizers, Irrigation, Protection from weeds, Harvesting & Storage.

14. Why is the soil turned and loosened before seeds are sown?

Ans. The soil is turned and loosened during the process of ploughing. The ploughing loosens the soil particles and turns the soil to the upper surface. This allows the nutrients from the dead organism to be released back into the soil and better penetration and absorption of nutrients by plant roots.

15. What is humus? How is it formed?

Ans. Humus is a kind of soil rich in nutrients. It is formed by the microbial action on dead decaying bodies of plants and animals. It's generally formed on those spots where – there are dense layers of trees. The soil below it becomes dark having more number of pathogenic bacteria.

16. Why does a farmer rotate crops in the field? (Crop-rotation)

Ans. If the same crop is grown in the field year after year, it will lead to the deficiency of certain minerals. It is due to this fact that the same crop requires the same type of nutrients. To solve this problem, farmers are encouraged to grow one pulse crop in – between two cereal crops in the field. So the method of successive cultivation of different crops in an orderly manner on the same fields, in contrast to a one-crop-system or haphazard crop successions is known as crop rotation. For example, growing legumes as fodder in one season and wheat in the next season. The roots of legumes have so many nodules which contain nitrogen-fixing bacteria. These convert free atmospheric nitrogen into nitrates and increase the fertility of the soil. (Replenishing of soil with nitrogen)

17. What safety measures are to be taken in handling pesticides and weedicides?

Ans. Weedicides and pesticides are highly poisonous chemicals. They kill the pests. They can harm the human also. So, certain precautionary measures should be taken while spraying pesticides and weedicides.

They should be kept away from the reach of children.

They should not be inhaled while spraying. Gloves and mouth covers should be used while spraying them. Hands should be washed properly after their use

18. Distinguish between pesticides and weedicides.

Ans. Weeds are controlled by using certain chemicals called weedicides. These chemicals don't cause any damage to the crop. Pesticides are chemicals that are used to kill the pests growing on the crops. They kill the eggs and larvae of the insects.

19. Which bacteria are present in the legumes of leguminous plants?

Ans. Rhizobium.

20. The Crops which are grown in rainy season are called _____.

(a) Rabi Crop (b) Seasonal Crop (c) Monsoon crop (d) Kharif crop

Ans. (d) Kharif crop