

17. Agriculture

Exercises

1 A. Question

Answer the following questions.

Besides using plants for food, in which other ways do we make use of plants?

Answer

Agriculture was used largely for growing crops besides this. This process is now used in floriculture and growing medicinal plants. The plant in floriculture includes tuberose, roses, marigolds, chrysanthemums. The medicinal plants are serpentina, gulvel, asparagus etc. Plants like raanbhendi, parrot tree, jatropa etc.

1 B. Question

Answer the following questions.

Write the three stages of the tilling of land in the proper order.

Answer

1. Pre-Sowing Stage: This stage includes ploughing & harrowing of land.
2. Sowing Stage: This stage includes soil arrangement & planting the seedlings.
3. Post Sowing Stage: This stage includes thinning of crops, watering, adding fertilizers and spraying pesticides.

1 C. Question

Answer the following questions.

What are the advantages of pre-sowing tilling activities?

Answer

In the pre-sowing tilling activities, the land is ploughed deep, which turns the soil up. This action makes the soil friable for growing the crops. The stubble and roots of the previous crop become loose and are picked out.

This action also helps in killing the germs & insects in the soil and hence the air can enter deep in the soil.

1 D. Question

Answer the following questions.

What are the activities at the post-sowing stage of tilling?

Answer

The steps are:

1. Thinning of the crop: It helps to prevent overcrowding. The number of plants is reduced by pulling some out. Roots that are exposed during thinning are again covered with soil.
2. Loosening the soil and weeding: Loosening the soil keeps the air moving freely around the soil. Sickle is used for this operation.
3. Watering & Adding Fertilizers: Fertilizers & water are being added to the growing crop at a regular interval of time.

1 E. Question

Answer the following questions.

Explain the difference between 'thinning the crop' and 'weeding'.

Answer

Thinning the crop	Weeding
It is a post sowing stage in which Prevents overcrowding as the numbers of plants are reduced by pulling them out.	Pulling out unwanted grown plants especially weed is called weeding.
This is performed only by pulling the plant out.	This can be done using some weedicides.
Plants left standing get adequate water and fertilizers.	Weeding also causes loosening of soil for air to freely move.

1 F. Question

Answer the following questions.

Explain the difference between preventive and curative spraying of chemicals.

Answer

PREVENTIVE SPRAYING OF CHEMICALS	CURATIVE SPRAYING OF CHEMICALS
Germicides, insecticides, fungicides are sprayed to protect the crop. If the chemicals are sprayed to prevent the crop from being attacked by insects or infected by germs or fungi it's a preventive measure.	If the spraying is done on a crop that has already been affected by germs, fungi, insects are a curative measure.

1 G. Question

Answer the following questions.

What is the method used for sowing each of the following crops?

wheat, rice, sugarcane, pumpkin, jowar, cotton. How many methods are there of sowing seeds?

Answer

Crops like rice are sown by transplanting seedling. Seedling is first grown in a seedbed. Seed bed is made by piling soft soil on the ground.

Sugarcane is planted in furrows made in soil.

Seeds of some varieties as cotton, pumpkin and watermelon are sown by

Poking them into the soil one by one.

There are various ways of sowing seeds-

- 1) The seed may be scattered on the field.
- 2) Poked into the soil one by one.
- 3) Prepared seedling may be transplanted.

2. Question

Match the following.

	A	B
a	Plough	1)Sowing
b	Seed drill	2)Weeding
c	Sickle	3)Ploughing
d	Scythe	4)Harvesting

Answer

	A	B	Explanation
a	Plough	3)Ploughing	A plough is used for ploughing.
b	Seed drill	1)Sowing	Seed drill like tiphan, pabhar, mogada are used for sowing.
c	Sickle	2)Weeding	Sickle is used for weeding.
d	Scythe	4)Harvesting	A scythe is used for harvesting.

3 A. Question

Give scientific reasons.

How deep the land should be ploughed depends upon the specific conditions.

Answer

Ploughing depends on the depth because during ploughing soil is turned up. This makes the soil friable and suitable for growing crops. Weeding becomes easier. The stubble and roots of previous crops become loose and are picked out.

3 B. Question

Give scientific reasons.

The importance of a sickle cannot be judged from its small size.

Answer

Sickle is a hand-held agricultural tool designed having a variously curved blade and typically used for harvesting, or reaping, grain crops or cutting. Being small in size its curved shape provides a very good cutting support.

3 C. Question

Give scientific reasons.

Farming implements should be stored in dry places.

Answer

Farming implements should be stored in dry places not in damp and humid places because wood can be attacked by termites and iron get rusted. Rusting and termites shorten the life span of tools.

4. Question

Write a note on: Hybridization.

Answer

Hybridization is the crossing of dissimilar individuals to produce best of both organisms.

One advantage of hybridization is that it can combine disease resistance of one organism with the production capacity

of the another.

Tissue culture is a part of hybridization this involves growing of cells

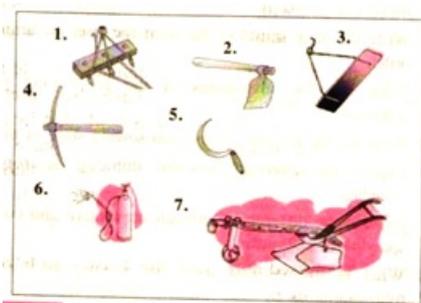
Outside the plant is called tissue culture.

Tissue culture involves production in a micro form.

A solid medium or a viscous broth is used for growing cells or tissues. Examples are banana and some medicinal plants. The method of tissue culture is used for preserving plants which are getting extinct.

5. Question

Label the picture given below:



Answer

- 1) Tiphon
- 2) Spade
- 3) Wooden Spade
- 4) Pickaxe
- 5) Scythe
- 6) Pump
- 7) Plough

Activities

1. Question

Go to a garden nearby and find out from the gardener how he takes care of the garden.

Answer

The gardener takes care of garden right from preparing the soil, using good seeds and fertilizers, to protecting the crop and storing it properly.

Proper steps of tilling the soil includes pre sowing , sowing ,post sowing methods includes spraying weedicides, germicides etc.

2. Question

In a vacant plot in your yard, grow some leafy vegetables, following the stages of cultivating a crop.

Answer

Vegetables like cluster beans, tomato, brinjal, fenugreek, bitter gourd etc are usually grown.

land is tilled in three steps this is called Tilling of land- pre sowing methods land is ploughed to make the soil loose, sowing the land this involves arranging the soil and sowing the seeds or planting the seedlings, post sowing involves thinning the soil by pulling out the extra plants, loosening the soil and weeding, watering adding fertilizers, spraying .

At last they are harvested at right time, this helps gather the maximum possible produce of vegetable planted.

3. Question

Find out some information about afforestation.

Answer

Afforestation is the process of planting trees, sowing seeds, in a barren land without any trees to create a forest. The importance is immense in today's life because it is mainly done for commercial purposes.

Owing to the sensitivity to over usage and slow growths, these forests cannot be used continuously for commercial purposes like wood products.