Exercise Questions

1. Select the correct word from the following list and fill in the blanks.
   float, water, crop, nutrients, preparation

   (a) The same kind of plants grown and cultivated on a large scale at a place is called ______________.
   (b) The first step before growing crops is ______________ of the soil.
   (c) Damaged seeds would ______________ on top of water.
   (d) For growing a crop, sufficient sunlight and ______________ and ______________ from the soil are essential.

   Soln:
   (a) The same kind of plants grown and cultivated on a large scale at a place is called crop.
   (b) The first step before growing crops is preparation of the soil.
   (c) Damaged seeds would float on top of water.
   (d) For growing a crop, sufficient sunlight and water and nutrients from the soil are essential.

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

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Kharif crops</td>
<td>(a) Food for cattle</td>
</tr>
<tr>
<td>(ii) Rabi crops</td>
<td>(b) Urea and super phosphate</td>
</tr>
<tr>
<td>(iii) Chemical fertilisers</td>
<td>(c) Animal excreta, cow dung urine and plant waste</td>
</tr>
<tr>
<td>(iv) Organic manure</td>
<td>(d) Wheat, gram, pea</td>
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<tr>
<td></td>
<td>(e) Paddy and maize</td>
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</tbody>
</table>

   Soln:
   (i) Kharif crops (e) Paddy and maize
   (ii) Rabi crops (d) Wheat, gram, pea
   (iii) Chemical fertilisers (b) Urea and super phosphate
   (iv) Organic manure (c) Animal excreta, cow dung urine and plant waste

3. Give two examples of each.
   (a) Kharif crop
   (b) Rabi crop

   Soln:
   Kharif crops- Paddy and maize
   Rabi crops- Wheat and Pea
4. Write a paragraph in your own words on each of the following.
(a) Preparation of soil
(b) Sowing
(c) Weeding
(d) Threshing

Soln:

a) Preparation of soil is the first step in agriculture. Preparation of soil is done to loosen the soil which is essential for the root penetration into the soil. This allows the roots breathe easily. Loosening of soil allows growth of earthworms and microorganisms which will help to keep the soil fertile by adding humus to the soil. Loosening of soil also bring nutrient rich soil to the top layer which is essential for the growth of plants.

b) Sowing is an important process in crop production. First healthy seeds are select before sowing. After selecting healthy seeds sowing is done by either traditional methods or by using equipment’s seed drill.

c) Removal of unnecessary plants from the field is called as weeding. Weeds compete with crop plants for nutrients and water. This will reduce the yield of the desired crops. Weeds also interfere while harvesting and gets mixed with crops. Some weeds are poisonous to animals and humans. Tilling is a common method which helps removal of weeds before sowing crops, manual methods like physical removal of plants are used to remove weeds. Weedicides are sprayed to get of weeds, but this method may affect the health of farmers because of chemical used as weedicides.

d) Process of separating chaff from the crop is known as threshing. Threshing is carried by machine called ‘combine’ which is a harvester as well as a thresher. Threshing is also done by winnowing where blow of wind is used to separate chaff from crops.

5. Explain how fertilisers are different from manure.

Soln:

<table>
<thead>
<tr>
<th>Fertilizers</th>
<th>Manure</th>
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</thead>
<tbody>
<tr>
<td>Fertilizer is an inorganic substance</td>
<td>Manure is organic substance</td>
</tr>
<tr>
<td>Fertilizers are prepared artificially</td>
<td>Manure is obtained by decomposition of animal, plant and human waste.</td>
</tr>
<tr>
<td>Prepared in factories</td>
<td>Prepared in fields</td>
</tr>
<tr>
<td>Does not provide Humus to the soil</td>
<td>Provide Humus to the soil</td>
</tr>
<tr>
<td>Rich in plant nutrients</td>
<td>Relatively less plant nutrients</td>
</tr>
<tr>
<td>Long term usage has adverse effects on soil</td>
<td>Long term usage improves soil fertility</td>
</tr>
</tbody>
</table>
6. What is irrigation? Describe two methods of irrigation which conserve water.

Soln:

The supply of water to crops at regular intervals is called irrigation. Methods of irrigation which conserve water are
a) Drip Irrigation: Here the water goes drop by drop directly into the roots this method is very useful as it conserve the water and also helps in avoiding weeds.

b) Sprinkler system: This method is in use mainly uneven land where sufficient water is not available. The perpendicular pipes, having rotating nozzles on top, are joined to the main pipeline at regular intervals. When water is allowed to flow through the main pipe under pressure with the help of a pump, it escapes from the rotating nozzles. It gets sprinkled on the crop as if it is raining.

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

Soln:

Wheat crops may get destroyed if sown in kharif season because of unfavorable temperature, pests and adoptable conditions for the plants to grow. Kharif come during rainy season hence it is not a wise idea to grow wheat in khariff season.

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

Soln:

Plants require nutrients for their growth. Without optimum nutrients plants will die. Continuous plantation of crops results in depletion of certain nutrients like Nitrogen, Phosphorus, Potassium etc. This results in the decrease of yield due to loss of nutrients hence there should be gap between crops in order to get good yield.

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

Soln:

In a field many other undesirable plants may grow naturally along with the crop. These undesirable plants are called weeds. Weeds can be control by methods called as weeding. Tilling before sowing of crops helps in uprooting and killing of weeds, which may then dry up and get mixed with the soil. Weeds are also controlled by using certain chemicals, called weedicides.

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

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1. Sending crop to sugar factory
2. Irrigation
3. Harvesting
4. Sowing
5. Preparation of soil
6. Ploughing the field
7. Manuring
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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.

Soln:

DOWN ↓
1. IRRIGATION
2. STORAGE
5. CROP

ACROSS →
3. HARVESTER
4. Gram
6. WINNOWING

H A R V E S T O R
R O R A G E
G R A M
T I C
W I N N O W I N G
P