



মণিপুরৰ চৰকাৰ (আংল)

DEPARTMENT OF EDUCATION (S)

Government of Manipur

CHAPTER- 1. CROP PRODUCTION AND MANAGEMENT

SOLUTIONS:

EXERCISES

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

float, water, crop, nutrients, preparation.

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

Ans –

- Crop
- Preparation
- Float
- Water, nutrients.

Q2. Match item in column A with those in column B

A	B
i. Kharif crops	a. Foot for cattle
ii. Rabi crops	b. Urea and super phosphate
iii. Chemical fertilizers	c. Animal excreta, cowdung, urine and plant waste.
iv. Organic manure	d. Wheat, gram, pea
	e. Paddy and maize.

Ans-

A

B

- Kharif crops
- Rabi crops
- Chemical fertilizers
- Organic manure

- Paddy and maize.
- wheat, gram, pea
- urea and superphosphate
- animal excreta, cowdung, urine and plant waste.

Q3. Give two example of each.

- a. Kharif crop
- b. Rabi crop

Ans- a. kharif crop – paddy and maize

b. Rabi crop – wheat and pea

Q4. Write a paragraph in your own words on each of the following

- a. Preparation of soil
- b. sowing
- c. Weeding
- d. Threshing

Ans-

a. Preparation of soil

Preparation of soil is the first step before sowing a crop. This is done to loosen the soil. Loosened soil allows root to penetrate deep and breathe easily inside the soil. This also helps in the growth of the several soil microbes, earthworm etc, which enrich the soil with humus and other essential nutrients. Moreover, loosening of soil also helps to bring the nutrients rich soil to the top and support the growth of the plant. The process of loosening of the soil is called tilling or ploughing. This is done by using a plough, hoe and cultivator.

b. Sowing

Sowing is the process of placing seed in soil to germinate and grow into plant. Healthy and good quality seeds are selected and sown in prepared soil with the help of various traditional tool and seed drill. Traditional tool is shaped like funnel and through it the seeds are passed down to the soil. Nowadays seed drill is used for sowing with the help of Tractors. This tool disperses seeds uniformly at equal distance and depth. Sowing by this method saves time, labours and also protects the seed from birds.

c. Weeding

The undesirable plants that grow naturally along with the crop are called weeds and the removal of such plants is called weeding. Weeds compete with the crop plant for water, nutrients space and light. This reduces the yield of the crops. Tilling is a common method which helps removal of weeds before sowing crop. It is also done manually by uprooting or cutting them close to the ground from time to time with the help of 'Khurpi'. Weeds can also be controlled by certain chemical called weedicides like 2,4-D. It can be sprayed in the fields to kill all available weeds. Weedicides are not harmful to crops.

d. Threshing

The process of separating the grain seeds from the chaff of harvested crop is known as Threshing. It is done after harvesting of crops. This is carried out with the help of a machine called 'Combine' ie, a machine that combine harvester and thresher. Farmers with small holdings of land do threshing and winnowing.

Q5. Explain how fertilizers are different from manure.

Ans- Fertilizers are manmade inorganic salt which are rich in a particular nutrients like nitrogen, phosphorous, potassium etc. These are prepared in factories and help farmers to get better yield of crops . But excess uses of it has made the soil less fertile. Fertilizers does not provide any humus to the soil and also become a source of water pollution. Whereas Manure is obtained from the decomposition of plants and animals waste. It can be prepared in the fields and provide a lot of humus to the soil. Manure is relatively less rich in plants nutrients and does not cause harm to others. Therefore in order to maintain the fertility of the soil, we have to substitute fertilizers with this organic manure in the field.

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

Ans- The supply of water to crops at regular intervals is called irrigation. The two methods of irrigation which conserve water are- i. Sprinkler

system and ii. Drip system.

i. Sprinkler system-

This system is used on the uneven land where sufficient water is not available. In this method, water is supplied using the perpendicular pipes, having rotating nozzle on top, are joined to the main pipeline at regular intervals. When water is allowed to flow under pressure with the help of a pump, it escapes from the rotating nozzle and sprinkled on the crops.

ii. Drip System-

In this system water is delivered at or near the roots drop by drop directly. It is the best technique for watering fruit plants, garden and trees. As there is no wastage of water, this method is important in area where water availability is poor.

Q7 . If the wheat is sown in the kharif season, what would happen? Discuss?

Ans- Wheat is a rabi crop and requires very less water. But kharif crop's span includes rainy season. So, If we sow wheat in the kharif season, the excess water due to rain might destroy the crop.

Q8. Explain how soil gets affected by the continuous plantation of crops in a field.

Ans-Soil supplies nutrients to the crop. If continuous plantation of crop is done, then the soil will become poor in certain nutrients like nitrogen, potassium, phosphorous etc which are essential for proper growth of the plants. This will make the soil less fertile resulting in poor yield.

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

Ans- Weed are the undesirable plants that grow naturally along with the crop. Weed competes with the crop plant for water, nutrient, space, light and thus reduce the yield of the crops.

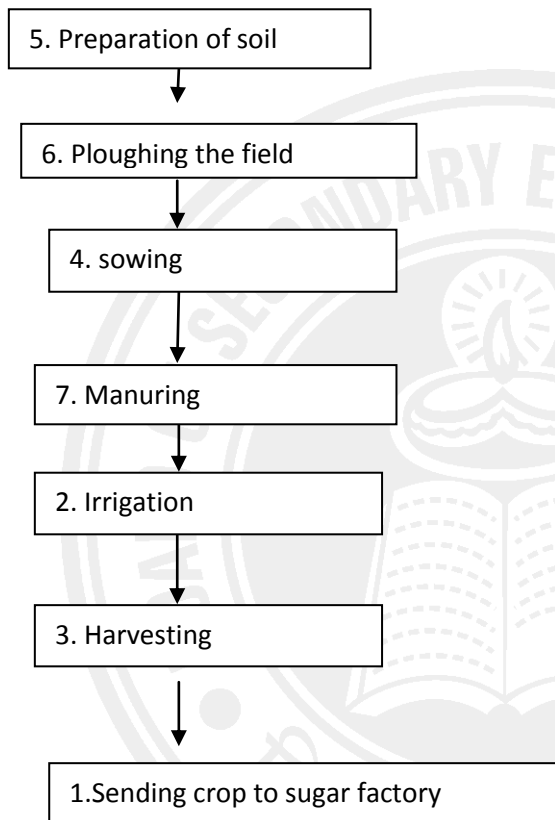
Weeds can be controlled by the following methods:

- Tilling method can help in removing of weeds before sowing crop
- It can be done manually by uprooting or cutting them close to the ground from time to time with the help of Khurpi.
- Spraying weedicides in the field can also kill all available weeds.

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

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

Ans-



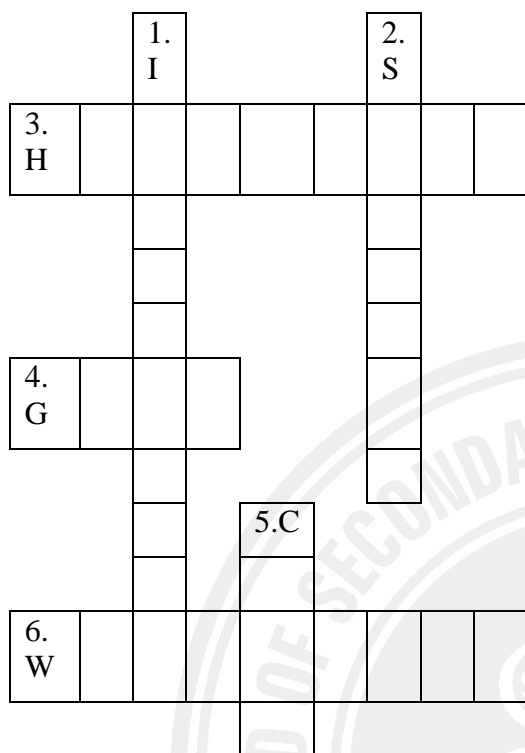
Q11. Compile the following word puzzle with the help of clues given below.

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 natured crop.
4. A rabi crop that is also one of the pulses.
5. A process of separating the grains from chaff.

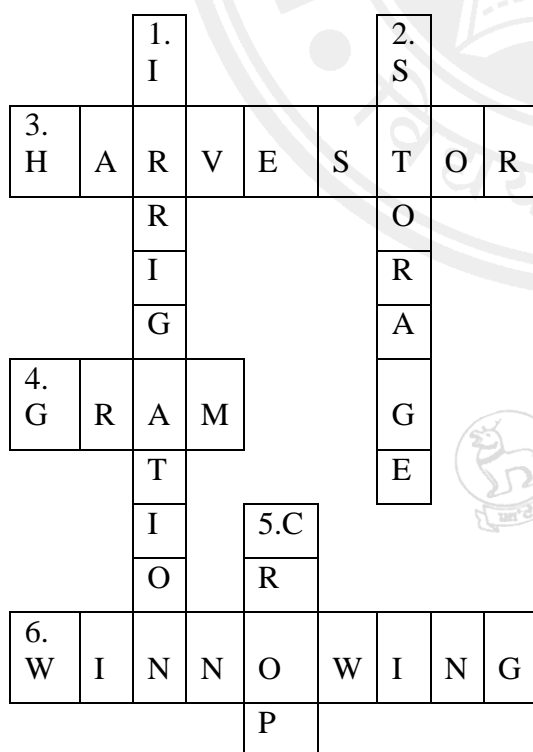


Ans- DOWN

1. Irrigation
2. Storage
3. Crop

ACROSS

3. Harvester
4. Gram
6. Winnowing



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EXTRA QUESTIONS AND ANSWERS

Q1. What are kharif crops? Give example.

Ans:- The crops which are sown in the rainy season between June to September are called kharif crops.

Eg. Paddy, maize, soya bean etc.

Q2. What are Rabi crops? Give example.

Ans:- The crops grown in the winter season between October to March are called Rabi Crops.

Eg. Wheat, gram, pea etc.

Q3. Why paddy cannot be grown in the winter season?

Ans- Paddy is a kharif crop and requires a lot of water. Therefore, It is grown only in the rainy season.

Q4. What is Tilling?

Ans- The process of loosening and turning of the soil is called Tilling.

Q5. What is crop rotation?

Ans- Crop rotation is the practice of growing a series of different types of crops in the same area in sequenced seasons. This method replenishes the soil with nutrients.

Eg. Crop rotation between a nitrogen using plant wheat and a nitrogen depositing plant, pea (leguminous plant).

Q6. What are the advantages of manure over fertilizers?

Ans- Advantages of manure over fertilizers are

- i. Manure enhances the water holding capacity of the soil.
- ii. It makes the soil porous due to which exchange of gases becomes easy.
- iii. It increases the number of friendly microbes.
- iv. It improves the texture of the soil.
- v. It can be prepared in the field by the farmers.

Q5. Why proper storage of crop product is necessary?

Ans- Proper storage of crop product is necessary to protect them from pests and microbes. The harvested food grains are dried in the sunshine before storing in order to reduce their moisture content. This prevents the attack by insects pests, bacteria and fungi.