Crop Production and Management

Very Short Q&A :

Q1: Tick the right answer
We get our food from

a. **Plants**
b. **Animals**
c. **Both plants and animals**
d. **None of these**

Ans: C

Q2: The same kind of plants grown and cultivated at one place on large scale is called_____.
View Answer

Ans: Crop

Q3: Is crop production and management is important to provide food for a large number of population?

a. **Portuguese**
b. **English**
c. **Dutch**
d. **Spanish**

Ans: Yes

Q4: Define crop.

Ans: Plants of same kind that are grown and cultivated at one place on large scale is called a crop

Q5: Name some crop plants.

Ans: Some of the crop plants are wheat, rice, maize, sugarcane, cotton, vegetables, fruits etc.

Q6: Classify crops on the basis of seasons in which they are grown.

Ans: On the basis of season in which crops are grown they are classified into: Rabi crops and Kharif crops

Q7: Define kharif crops with examples.

Ans: The crops which are sown in rainy season that is generally from june to September in India are called kharif crops. e.g: cotton, maize, paddy, groundnut etc.

Q8: Define rabi crops with examples.

Ans: The crops which are sown in winter season that is generally from October to march in India are called rabi crops. e.g: wheat, mustard, gram, pea etc.

Q9: Why can paddy not be grown in winter season?

Ans: Paddy plants requires lot of water for their proper growth and development, thus paddy can be grown in rainy season only and not in winter season.

Q10: Ploughing is done by _____.

Ans: Plough

Q11: Hoe is a simple tool which is used for removing _____.

Ans: Weeds

Q12: What is seed drill?

Ans: Seed drill is a tool which is used for sowing seeds with the help of tractors, this tool sows the seeds uniformly and at proper distances and depths in the soil. It ensures that seeds get properly covered by the soil after sowing.

Q13: What do you mean by good quality seeds?

Ans: Following are the characteristics of a good quality seed:

It should be clean
It should be healthy and of good variety
It should have high yield
It should be disease resistant

Q14: What do you understand by manures?

Ans: Manures are organic substances obtained from the decomposition of plants and animal wastes which provides lot of humus to the soil. It is very important for the healthy growth of plants.

Q15: Continuous growing of crops makes the soil poorer in certain_____.

Ans: nutrients

Q16: What is manuring?

Ans: Farmers add manure to the fields to replenish the soil with nutrients and to increase their crop production, this process of adding manures to the field is called manuring.

Q17: What do you understand by fertilisers?

Ans: Fertilisers are chemical substances which are rich in particular nutrients like nitrogen, phosphorus and potassium, they are produced in factories. example: urea, NPK, ammonium sulphate etc.

Q18: Name the bacteria which fix atmospheric nitrogen.

Ans: Rhizobium bacteria

Q19: Which one is better organic manure or fertilisers?

Ans: Organic manure is better than fertilisers

Q20: What do you mean by the term irrigation?

Ans: Water is very important for proper growth and development of plants, thus for healthy crop growth fields have to be watered regularly, this supply of water to crops at appropriate interval called as irrigation.

Q21: Name different sources of irrigation.

Ans: Source of irrigation: ponds, lakes, rivers, dams, canals, wells, and tubewells.

Q22: Name the following shown traditional methods of irrigation:

Ans: Moat Dhekli, Sprinkler system , Drip system

Q23: Give few examples of weedicides.

Ans: 2,4-D

Q24: Is there any harmful effect of weedicides on the person handling the weedicides sprayer?

Ans: Yes, it may affect the health of sprayer, so he should cover their nose and mouth with a piece of a cloth during spraying of weedicides.

Q25: Weedicides sprayer should cover their _____ and _____ with a piece of cloth during spraying of these chemicals.

Ans: nose and mouth

Q26: Define harvesting.

Ans: Cutting of matured crop manually or by machine is called harvesting

Q27: Define threshing.

Ans: In the harvested crops the grain seeds are separated from the chaff, this process is called threshing.

Q28: What is a "combine"?

Ans: Combine is a machine which is used for harvesting as well as threshing of crops or simply we can say combine is a combined harvester and thresher.

Q29: What are harvest festivals?

Ans: A Harvest Festival is an annual celebration that occurs around the time of the main harvest of a given region. The efforts of the farmer of past season borne fruit in the form of crop, laden with grain, at this point they celebrate harvest festival to express their joy and happiness. Special festivals associated with the harvest season are pongal, Baisakhi, Holi, Diwali, Nabanya and Bihu.

Q30: What do you mean by animal husbandry?

Ans: Like plants animals also provide us with large variety of food items for which they are reared at home or in farms. They are provided with proper food, shelter and care, this is called animal husbandry

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Short Q&A :

Q1: Define crop along with examples

Ans: Plants of same kind that are grown and cultivated at one place on large scale are called a crop. Some of the crop plants are wheat, rice, maize, sugarcane, cotton, vegetables, fruits etc.

Q2: Differentiate between kharif and rabi crops

Ans:

Rabi crops	Kharif crops
a. Grown in winter season b. They do not need lot of water c. In india time period for winter season is from October to march so they are grown in this time period only d. Examples: linseed, wheat, gram, pea etc	a. Grown in rainy season b. They require lot of water c. In india time period for rainy season is from june to september so they are grown in this time period only d. Examples: paddy, maize, cotton, groundnut etc.

Q3: Name all the activities involved in agricultural practices for crop production

- **Preparation of soil by tilling and levelling**
- **Sowing of seeds into prepared soil**
- **Adding manure and fertilisers for replenishment and enrichment of soil and healthy growth of crops**
- **The supply of water to crops at appropriate interval called as irrigation**
- **Protecting from weeds by using weedicides**
- **Harvesting of crops by machines**
- **proper storage of crops to protect them from harmful effects of pests and microorganisms**

Ans: Following are the activities involved in agricultural practices for crop production

Q4: What do you mean by preparation of soil?

Ans: The first step before growing a crop plant is the preparation of soil for sowing of seeds, the soil has to be loosened so that the roots of plants may penetrate deep into the soil, the loosening of soil allow the roots to breathe easily because loosened soil promotes growth of organisms like earthworms and microbes which are the farmer friends as they further turns and loosen the soil and add humus to it, apart from this turning and loosening of soil brings the nutrient rich soil to the top and the top layer of soil supports plant growth, thus nutrient rich soil at the top layer helps in good and healthy crop and hence turning and loosening of soil is very important for cultivation of crops. The process of loosening and turning of the soil is called tilling or ploughing and is carried on by using a plough.

Q5: Why loosened soil is important for cultivation of crops?

Ans: The first step before growing a crop plant is the preparation of soil for sowing of seeds, the soil has to be loosened so that the roots of plants may penetrate deep into the soil, the loosening of soil allow the roots to breathe easily because loosened soil promotes growth of organisms like earthworms and microbes which are the farmer friends as they further turns and loosen the soil and add humus to it, apart from this turning and loosening of soil brings the nutrient rich soil to the top and the top layer of soil supports plant growth, thus nutrient rich soil at the top layer helps in good and healthy crop and hence turning and loosening of soil is very important for cultivation of crops. The process of loosening and turning of the soil is called tilling or ploughing and is carried on by using a plough.

Q6: Define ploughing.

Ans: The process of loosening and turning of the soil is called tilling or ploughing and is carried on by using a plough. plough are made by wood or iron material, it is being used since ancient time for different purposes like tilling the soil, adding fertilisers to crops, removing weeds etc. this implement is drawn by a pair of bulls or other animals like camels, horses etc

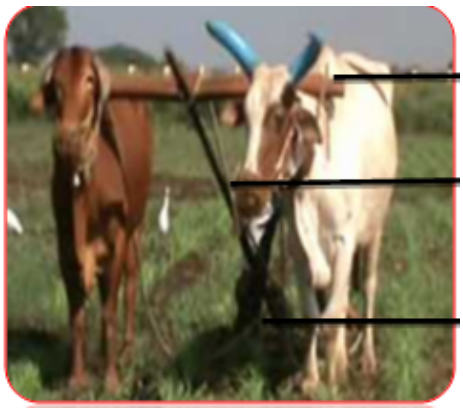
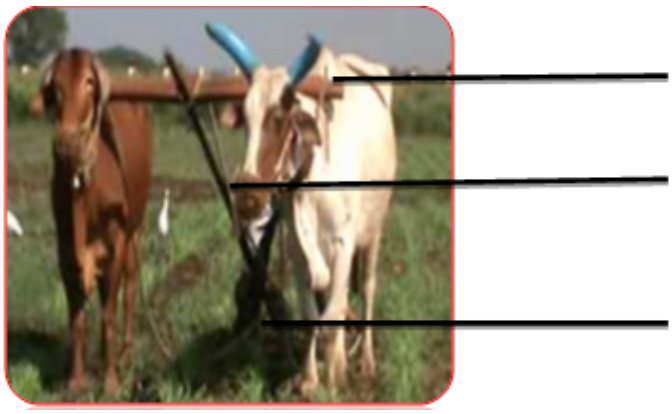


Diagram of a plough

Q7: Label the following Diagram:



Ans: a. Beam ,b. Ploughshaft ,c. Ploughshare

Q8: Write a paragraph in your own word on each of the following:

a. **Tilling**
b. **Weeds**

Ans:

a. Tilling:The process of loosening and turning of the soil is called tilling or ploughing and is carried on by using a plough. plough are made by wood or iron material, it is being used since ancient time for different purposes like tilling the soil, adding fertilisers to crops, removing weeds etc. this implement is drawn by a pair of bulls or other animals like camels, horses etc.
b. Weeds:weeds are unwanted plants that grow along with crop plants and compete with them for water, nutrients, space and light, thus they effect growth of crop plants. Some of the weeds are poisonous for animals and human beings and they interfere even in harvesting of crop plants. Weedicides are chemical that are sprayed in the fields to kill the weeds, they do not damage the crops. Weedicides are diluted with water and are sprayed in the field by sprayer to kill the weeds.

Q9: Write shorts notes on:

a. **Showing of seeds**
b. **Threshing**

Ans:

a. Showing of seeds:One of the important part of crop production is sowing. Good quality seeds are selected and are sown in prepared soil with the help of various tools like traditional tools and seed drill.
Traditional tools: The shape of this tool is like a funnel which is filled by seeds, then the seeds are passed down through two or three pipes having sharp ends and these ends pierce into the soil and place seeds there.
Seed drill: Now a day traditional tool has been replaced by seed drill. This tool is used for sowing with the help of tractors and it sows the seeds uniformly and at proper distances and depth, it also ensures covering of the seeds from soil after sowing, so that seeds could not get damaged by birds and by other organisms. Sowing by using a seed drill saves time and labour. In order to avoid overcrowding of plants it is very important to leave some space between two seeds. This also allows plants to get sufficient sunlight, nutrients and water from the soil.
b. Threshing:In the harvested crops the grain seeds are separated from the chaff, this process is called threshing, this is carried out with the help of a machine called combine which works as harvester and thresher both.

Q10: Define plough and all of its part with the help of a labelled diagram.

Ans: he process of loosening and turning of the soil is called tilling or ploughing and is carried on by using a plough. plough are made by wood or iron material, it is being used since ancient time for different purposes like tilling the soil, adding fertilisers to crops, removing weeds etc. this implement is drawn by a pair of bulls or other animals like camels, horses etc.

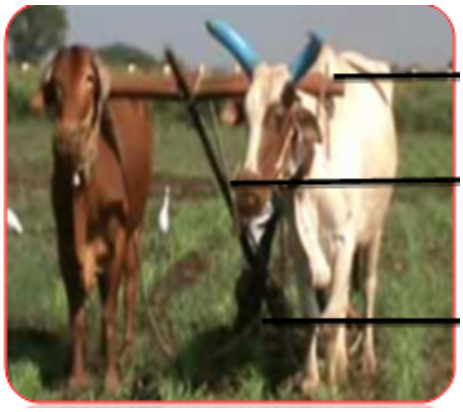
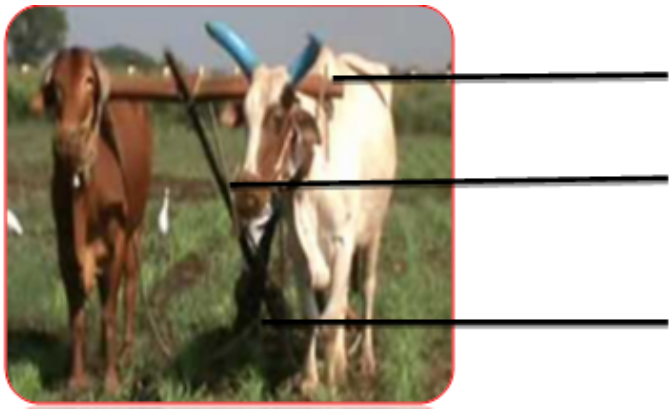
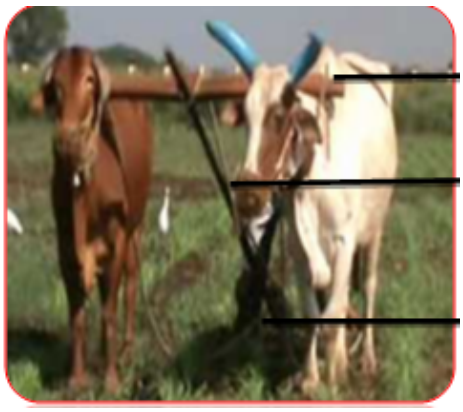


Diagram of a plough



Q11: Define hoe and all of its part with the help of a labelled diagram.

Ans: The process of loosening and turning of the soil is called tilling or ploughing and is carried on by using a plough. plough are made by wood or iron material, it is being used since ancient time for different purposes like tilling the soil, adding fertilisers to crops, removing weeds etc. this implement is drawn by a pair of bulls or other animals like camels, horses etc.



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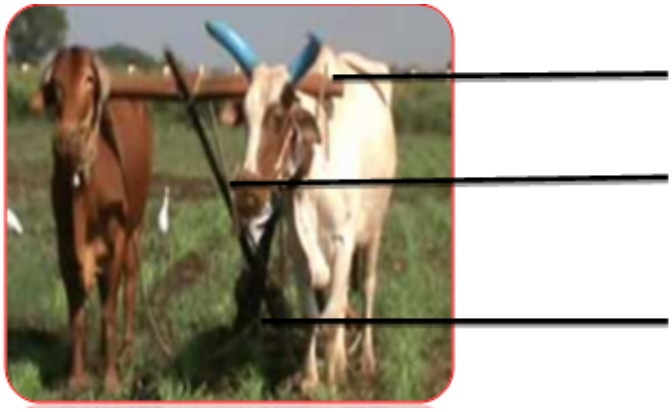

Q12: What are the advantages of a cultivator over plough for the purpose of ploughing?

Ans: Ploughing by cultivators save time and labour as cultivator is driven by tractors whereas plough is driven by pair of bull.

Q13: How could you separate good and healthy seeds from the damaged ones?

Ans: Take a beaker half filled with water and put some seeds into it and stir well, wait for some time. You will observe some seeds sink in water while some seeds float in water, damaged seeds become hollow and lighter and thus they float on water.

Q14: Write a short notes on tools used for sowing seeds.

Ans: Sowing of seeds: One of the important part of crop production is sowing. Good quality seeds are selected and are sown in prepared soil with the help of various tools like traditional tools and seed drill. Traditional tools: The shape of this tool is like a funnel which is filled by seeds, then the seeds are passed down through two or three pipes having sharp ends and these ends pierce into the soil and place seeds there. Seed drill: Now a day traditional tool has been replaced by seed drill. This tool is used for sowing with the help of tractors and it sows the seeds uniformly and at proper distances and depth, it also ensures covering of the seeds from soil after sowing, so that seeds could not get damaged by birds and by other organisms. Sowing by using a seed drill saves time and labour. In order to avoid overcrowding of plants it is very important to leave some space between two seeds. This also allows plants to get sufficient sunlight, nutrients and water from the soil.

Q15: What are the advantages of a seed drill used for sowing?

Ans: Sowing of seeds: One of the important part of crop production is sowing. Good quality seeds are selected and are sown in prepared soil with the help of various tools like traditional tools and seed drill. Traditional tools: The shape of this tool is like a funnel which is filled by seeds, then the seeds are passed down through two or three pipes having sharp ends and these ends pierce into the soil and place seeds there. Seed drill: Now a day traditional tool has been replaced by seed drill. This tool is used for sowing with the help of tractors and it sows the seeds uniformly and at proper distances and depth, it also ensures covering of the seeds from soil after sowing, so that seeds could not get damaged by birds and by other organisms. Sowing by using a seed drill saves time and labour. In order to avoid overcrowding of plants it is very important to leave some space between two seeds. This also allows plants to get sufficient sunlight, nutrients and water from the soil.

Q16: Why an appropriate distance between the seeds while sowing is important?

Ans: Sowing of seeds: One of the important part of crop production is sowing. Good quality seeds are selected and are sown in prepared soil with the help of various tools like traditional tools and seed drill. Traditional tools: The shape of this tool is like a funnel which is filled by seeds, then the seeds are passed down through two or three pipes having sharp ends and these ends pierce into the soil and place seeds there. Seed drill: Now a day traditional tool has been replaced by seed drill. This tool is used for sowing with the help of tractors and it sows the seeds uniformly and at proper distances and depth, it also ensures covering of the seeds from soil after sowing, so that seeds could not get damaged by birds and by other organisms. Sowing by using a seed drill saves time and labour. In order to avoid overcrowding of plants it is very important to leave some space between two seeds. This also allows plants to get sufficient sunlight, nutrients and water from the soil.

Q17: How could we supply nutrients to the soil?

Ans: We can supply nutrients to the soil by adding manure and fertilisers. Manures are organic substances obtained from the decomposition of plants and animal wastes which provides lot of humus to the soil. It is very important for the healthy growth of plants, and fertilisers are chemical substances which are rich in particular nutrients like nitrogen, phosphorus and potassium, they are produced in factories. example: urea, NPK, ammonium sulphate etc.

Q18: Differentiate between manure and fertilizers.

Ans:

Manure	Fertiliser
a. Manure is nothing but organic matter that is used as a fertilizer to increase the level of nutrients in a soil b. It can be prepared in field c. Manure provides a lot of humus to the soil. d. Fertilizers are made up of macronutrients such as nitrogen, phosphorus and potassium. Other substances in smaller quantities are also present in fertilizers such as iron, copper, boron, chlorine, manganese, zinc, and selenium	a. It is an inorganic salt b. It is prepared in factories c. Fertiliser does not provide any humus to the soil. d. Manure is relatively less rich in plant nutrients

Q19: What do you understand by manuring and what are the harmful effects of improper or insufficient manuring?

Ans: Farmers add manure to the fields to replenish the soil with nutrients and to increase their crop production, this process of adding manures to the field is called manuring. Improper manuring results in poor development of crop plants and unhealthy crops.

Q20: How could we prepare organic manure?

Ans: Organic manure can be prepared in fields. Dump plant and animal wastes in pits at open places and allow it to decompose by some of the microorganisms; the decomposed matter is used as manure.

Q21: Given three plants A, B and C , A is supplied with proper manure, B is supplied with manure but not in sufficient quantity, C is not supplied with any kind of manure, which of these A, B and C will show better growth and why?

Ans: A

Q22: What are the harmful effects of fertilisers?

Ans: Harmful effects of fertilisers: Excessive use of fertilisers makes soil less fertile. It is also considered as one of the source of water pollution Fertilizers can be either natural (organic) or synthetic. Natural fertilizers are those that are derived from plants or animals while synthetic fertilizers are those made in a laboratory. While natural fertilizers never harm the quality of soil and do not damage the produce, overuse of synthetic fertilizers may harm the soil in the long run.

Q23: What is crop rotation? How it helps in replenishment of the soil?

Ans: Crop rotation is the practice of growing a series of different types of crops in the same area in sequential seasons. Growing the same type of in the same place for many years in a row disproportionately depletes the soil of certain nutrients. With rotation, a crop that leaches the soil of one kind of nutrient is followed during the next growing season by a dissimilar crop that returns that nutrient to the soil or draws a different ratio of nutrients: for example, rice followed by cotton.

Q24: State advantages of manure

Ans: Advantages of manure:

- Water holding capacity of soil is increased by adding manure to the soil
- It increases the total number of friendly microbes in soil and thus increases soil fertility
- By adding manure soil become more porous so that the exchange of gases becomes easy
- It improves the texture of the soil.

Q25: What is irrigation and its importance?

Ans: Irrigation is the artificial application of water to crops at different intervals. The time and frequency of irrigation varies from crop to crop, soil to soil and season to season. Like in summer frequency of irrigation is higher because of the increased rate of evaporation. Water is very important for proper growth and development of flowers, fruits and seeds of plants, it plays important role in

- germination of seeds
- transportation of nutrients in different parts of plants
- protects crops from both frost and hot air currents
- it maintain the moisture of soil

Q26: Why we should supply more water to crops during summer season?

Ans: Because of the increased rate of evaporation of water from the soil and the leaves it is important to increase the frequency of watering in summer season.

Q27: Explain traditional methods of irrigation.

Ans: Traditional method of irrigation involves cattle or human labour and thus are cheaper than modern methods of irrigation, various traditional ways of irrigation are:

Moat (pulley system)
Chain pump
Dhekli
Rahat (Lever system)





Q28: Explain modern methods of irrigation.

Ans: Modern method of irrigation help us to use water economically, it involves following methods: Sprinkler system: In this system the perpendicular pipes with 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 pump, it escape from the rotating nozzles, it gets sprinkled on the crop as if it is raining, sprinkler is very useful for sandy soil. Drip system: In this system water falls drop by drop just at the position of the roots. So it is called drip system. It is the best technique for watering plants, trees and garden. This system provides water to plants drop by drop, and water is not wasted at all

Q29: What do you understand by weeds and weedicides?

Ans: Weeds: weeds are unwanted plants that grow along with crop plants and compete with them for water, nutrients, space and light, thus they effect growth of crop plants. Some of the weeds are poisonous for animals and human beings and they interfere even in harvesting of crop plants. Weedicides are chemical that are sprayed in the fields to kill the weeds, they do not damage the crops. Weedicides are diluted with water and are sprayed in the field by sprayer to kill the weeds.

Q30: What is the best time for the removal of weeds from the field?

Ans: The best time for the removal of weeds is before they produce flowers and seeds.

Q31: What is harvesting and how it is done?

Ans: The cutting of mature crops is called harvesting. It is done manually by sickle or by harvester.

Q32: How large scale storage of grains is done? How food grains are stored at home?

Ans: It is important to store food grains properly; they should be safe from moisture, insects, rats and microorganisms. The fresh crops has more moisture so freshly harvested grains should be stored only after drying properly in the sun otherwise it may get spoilt or attacked by organisms losing their germination capacity. This prevents the attack by insect pests, bacteria and fungi.

Farmers store crops in jute bags or metallic bins, large scale storage of grains is done in silos or granaries to protect them from pests like rats and insects. At home dried neem leaves are used to store food grains.

Long Q&A:

Q1: Describe various methods of agricultural practices involved in crop production and management.

Ans:

- Preparation of soil by tilling and levelling .
- Sowing of seeds into prepared soil
- Adding manure and fertilisers for replenishment and enrichment of soil and healthy growth of crops
- The supply of water to crops at appropriate interval called as irrigation
- Protecting from weeds by using weedicides
- Harvesting of crops by machines
- proper storage to protect them from harmful effects of pests and microorganisms

Q2: Define irrigation, its various methods and explain its two methods which conserve water.

Ans: Irrigation is the artificial application of water to crops at different intervals. The time and frequency of irrigation varies from crop to crop, soil to soil and season to season. Like in summer frequency of irrigation is higher because of the increased rate of evaporation. Water is very important for proper growth and development of flowers, fruits and seeds of plants, it plays important role in

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Q3: Describe the importance of weedicides, manures and fertilisers in good agricultural practice.

Ans: Weeds: weeds are unwanted plants that grow along with crop plants and compete with them for water, nutrients, space and light, thus they effect growth of crop plants. Some of the weeds are poisonous for animals and human beings and they interfere even in harvesting of crop plants. Weedicides are chemical that are sprayed in the fields to kill the weeds, they do not damage the crops. Weedicides are diluted with water and are sprayed in the field by sprayer to kill the weeds.

Q4: Explain harvest festivals.

Ans: A Harvest Festival is an annual celebration that occurs around the time of the main harvest of a given region. The efforts of the farmer of past season borne fruit in the form of crop, laden with grain, at this point they celebrate harvest festival to express their joy and happiness. Special festivals associated with the harvest season are pongal, Baisakhi, Holi, Diwali, Nabanya and Bihu.

Q5: Explain how continuous plantation of crops in a field affects the quality of soil.

Ans: Crop rotation is the practice of growing a series of different types of crops in the same area in sequential seasons. Growing the same type of in the same place for many years in a row disproportionately depletes the soil of certain nutrients. With rotation, a crop that leaches the soil of one kind of nutrient is followed during the next growing season by a dissimilar crop that returns that nutrient to the soil or draws a different ratio of nutrients: for example, rice followed by cotton.