

# X SS GEO

## Lesson 03

### India - Agriculture

#### I. Give Short Answers:

##### 1. Define Soil:

Soil is the uppermost layer of the land surface composed of minerals, organic matter living organisms and water.

##### 2. Name the types of soil found in India.

Alluvial soil, Red soil, black soil, Laterite soil, Forest and Mountain soil, Arid and Desert soil, Alkaline soil, Peaty and Marshy soil.

##### 3. State the two characteristics of black cotton soil.

- ♣ Consists of calcium and magnesium, carbonates
- ♣ High quantities of iron, Aluminum, Lime and Magnesia.
- ♣ Poor in Nitrogen and humus.

##### 4. Define Agriculture:

It is the process of producing food for people, fodder for cattle, fiber and many other desired products by the cultivation of plants and the raising of domesticated animals.

##### 5. State the types of agriculture practices in India.

Subsistence farming, Dry farming, Shifting Agriculture, Mixed farming, Intensive Farming, Terrace Farming

##### 6. Name the seasons of agriculture in India.

**Kharif Season** June – September, Rice, Cotton

**Rabi Season** October – March, Wheat, Mustard

**Zaid Season** April – June, Vegetables, fruits

##### 7. Mention the plantation crops in India.

Plantation crops are cultivated in large estates on hilly slopes,

Ex. Tea, Coffee, Rubber and Spices.

##### 8. What do you mean by Livestock?

Livestock is an integral component of the farming system in India. It is socially and economically important due to its multi functional outputs.

##### 9. Write a brief note on the categories of fisheries in India

###### Marine or Sea fisheries:

# It includes coastal, offshore, deep sea fisheries.

# Kerala leads in Marine fisheries.

Example: Catla, tor

###### Inland or Fresh water fisheries:

# It includes river, lakes, ponds etc.

# Andhra Pradesh lead in Inland fisheries.

Example: Mumbai duck, Shark

#### II. Give Reasons:

##### 1. Agriculture is the backbone of India.

Agriculture is the backbone of India , because it is the most important sector in the Indian economy which contributes around 23% to the Gross Domestic Product and more than 70% of the total work force is employed in this sector.

Almost all rural India is dependent on agriculture and allied activities like animal husbandry, dairy, poultry and fisheries.

##### 2. Rain water harvesting is necessary.

Water is a precious resource due to increases in demand from our ever growing population, because we depends on only monsoon rainfall, it is also highly erratic nature.

Rainwater harvesting can provide around 50 per cent of a family's water needs.

This not only saves water, but saves money and reduces our impact on the environment.

#### III. Distinguish between:

##### 1. Rabi Crop and Kharif Crop Season

S.No	Rabi Crop	Kharif Crop
1	Seeds are sown in October	Seeds are sown in June
2	Crops are harvested in March	Crops are harvested in September
3	Ex. Wheat, Gram & Barley	Ex. Rice, Cotton & Bajra

##### 2. Inundation Canal and Perennial Canal

S.No	Inundation Canal	Perennial Canal
1	Water is taken out directly from the rivers without making any kind of dam	These are developed from perennial rivers by constructing barrage to regulate the flow of water.
2	Useful for diversion of flood water	Useful for irrigation

##### 3. Marine Fishing and Inland fishing:

S.No	Marine Fishing	Inland fishing
1	It is carried on in coastal off shore and deep sea	It is carried on in rivers, lakes
2	Kerala is the leading producer.	Andhra Pradesh is the leading producer.
3	Ex. Catla, tor	Ex. Mumbai duck, Shark

##### 4. Alluvial Soil and Black Soil

S.No	Alluvial Soil	Black Soil
1	It is formed by the deposition of rivers	It is formed by weathering of Igneous rocks
2	It is sandy cley	It is sticky when wet
3	It is found in Northern Plains	It is found in Deccan Plateau

#### IV. Answer in a Paragraph:

##### 1. State the types of soil in India and explain the characteristics and distribution of Soil:

###### 1.Alluvial Soil

<b>Formation:</b>	Sediments deposited by streams and rivers.
<b>Chemical Properties:</b>	Rich in Potash
<b>Nature:</b>	Sandy- loam- silt-clay
<b>Distribution:</b>	Ganga and Brahmaputra river valleys
<b>Major Crops:</b>	Rice, Wheat & Sugarcane

###### 2.Black Soil

<b>Formation:</b>	Deccan Trap
<b>Chemical Properties:</b>	Consist of calcium and magnesium
<b>Nature:</b>	Sticky when wet
<b>Distribution:</b>	Maharashtra and Malwa Plateaus
<b>Major Crops:</b>	Cotton, Millets & Tabocco

###### 3.Red Soil

<b>Formation:</b>	Decomposition of Ancient crystalline rocks
<b>Chemical Properties:</b>	Rich in minerals
<b>Nature:</b>	Light texture
<b>Distribution:</b>	Deccan Plateau, Kerala, Tamil Nadu
<b>Major Crops:</b>	Rice, Wheat & Sugarcane

#### 4. Laterite Soil

<b>Formation:</b>	Formed by the process of leaching
<b>Chemical Properties:</b>	Composed mainly of hydrated oxides of iron and aluminum
<b>Nature:</b>	Loam and clay
<b>Distribution:</b>	Assam hills, hill summits of Kerala and Karnataka and eastern Ghats and region of Odisha.
<b>Major Crops:</b>	Coffee, Rubber & Cashewnut

#### 5. Forest and Mountain Soil

<b>Formation:</b>	due to mechanical weathering caused by snow, rain, temperature variation
<b>Chemical Properties:</b>	are deficient in potash, Phosphorus and lime
<b>Nature:</b>	light, sandy, thin and found with the pieces of rock
<b>Distribution:</b>	Coniferous forest belts of Jammu and Kashmir, Himachal Pradesh, Uttarakhand and Sikkim. Eastern and Western Ghats
<b>Major Crops:</b>	Coffee, Tea & Spices

#### 2. Write about any two Multipurpose project of India.

It is a scientific management of water resources in our country. Construction of dam, across river is aimed at many purposes such as irrigation, hydro power generation, water supply, controlling floods, development of fisheries and navigation. So it is called as multipurpose river valley project.

##### **Bhakra Nangal Project:**

- This Project is constructed across the river Sutlej.
- It is the highest gravity dam in the world.
- The states benefited are the Punjab, Haryana and Rajasthan
- The area of irrigation is 52,609 sq K.M
- It produces 1500Megawatts of Hydro Power.

##### **Hirakud Project:**

- This project is constructed across the river Mahanadi.
- It is the largest dam in the world.
- The state benefited is Orissa
- The area of irrigation is 1, 41,600 sq. km
- It produces 347.5 mw of Hydro power.

#### 3. Bring out the characteristics of Intensive and plantation farming:

##### **Intensive farming:**

- Intensive farming is an agriculture intensification and mechanization system.
- It had been applied to the raising of livestock.
- It aims to maximize yields.
- They are also known as factory farms.
- Areas : Punjab, Rajasthan, Uttar Pradesh, Madhya Pradesh

##### **Plantation farming:**

- Plantation farming is followed in large estates at hilly slope area.
- Main purpose of farming is export.
- It is both labour and capital intensive Crops cultivated are Tea, Coffee and rubber.

#### 4. Examine the geographical conditions favorable for the cultivation of rice and wheat.

##### **Rice**

1. Rice is an indigenous crop.
2. India is the second largest producer of rice in the world after China.

3. It is mainly a tropical crop, growing mainly with mean temperatures of 24°C and annual rainfall of 150 cm.
4. Deep fertile clayey or loamy soils are suited well for rice cultivation.
5. It also needs abundant supply of cheap labour.

##### **Wheat**

1. Wheat is the second most important food crop of the country, after rice.
2. It accounts for 22 percent of the total area and 34 percent of the total production of food grains in the country.
3. It requires 10-15°C at the time of sowing and 20-25°C at the time of ripening of grains.
4. Over 85% of the India's wheat production comes from 5 states namely Uttar Pradesh, Punjab, Haryana, Rajasthan and Madhya Pradesh.
5. Apart from these regions, the black soil tract of the Deccan covering parts of Maharashtra and Gujarat also contribute a major wheat production.

#### IX Hot questions

##### **1. Can you imagine a world without agriculture?**

1. A world without agriculture would be very different compared to the world we live in today.
2. It is easy for us as humans to take for granted things when we don't really know how they are grown or produced.
3. Without agriculture, we may not get food and clothing.
4. Without timber, we may not be able to build houses and furniture.
5. We may also be deprived of some everyday-products like soap, paper and ethanol, which are made up of some sort of agricultural by-product.
6. Modern medicine also depends on agriculture. Without agriculture, we wouldn't be here.
7. We must always be thankful for this industry and for those involved in the various activities related to it.
8. Simply, no problem for but life on earth without agriculture.

##### **2. Can you give solutions for the prevailing water disputes in South India?**

Most of the south Indian states are depends on monsoon rainfall, that also erratic in nature. Among the south Indian states, Karnataka and Kerala are depends on South West monsoon and Tamilnadu and part of Andrapradesh, Telungana, Pondichery are depends on North east monsoon. Most of the rivers are originated in the Western gates and confluence with Bay of Bengal. Due to this reason, the river naturally crossing more than one states. Because of this reason only water disputes starts.

To solve this disputes

1. Water Management Board should be formed and it should be a neutral organization with an authority.
2. State wise representative should also be member of the committee.
3. No dams shall be built without the approval of this committee
4. Supreme Court should be the chief justice in water related judgement. No more than that!
5. Converting salt water to purified water projects should spread all over the coastal areas
6. Should increase the green cover of land by planting trees.
7. Water related subjects and constitutional amendments should be transferred to union list completely.