

1 State any five types of soil in India and explain the characteristics and distribution of soil.

INTRODUCTION

Soil is the finest particle found on the earth surface.

The different types of soil are:

Alluvial soil

Black soil

Red soil

Laterite soil

Forest and mountain soil

Arid and desert soil

Saline soil and Alkaline soil

Peaty and marshy soil

ALLUVIAL SOIL

Formation:

Sediments deposited by streams and rivers when they slowly loose.

Chemical properties:

Rich in potash, phosphoric acid ,carbon compounds and lime in nitrogen.

Colour:

Light coloured (Khadar) Dark in colour (Bhangar)

Distribution:

Ganga and Brahmaputra river valleys, plains of Uttar Pradesh, Uttarakhand, Punjab, Haryana, West Bengal and Bihar.

Crops: Rice and Sugarcane.

BLACK SOIL:

Formation:

Derived from basalts of Deccan trap.

Chemical properties:

Consists of Calcium and magnesium carbonates, high quantities of iron, aluminium, lime and magnesia.

Rich in potash, and lime, poor in nitrogen and phosphoric acid and humus,

Nature:

Sticky when wet, high degree of moisture retentivity.

Colour:

Black colour due to presence of titanium and iron.

Distribution:

Maharashtra and Malwa plateau, Kathiawar Peninsula, Telangana and Rayalaseema of Andhra Pradesh, northern part of Karnataka.

Crops: Cotton and millets.

RED SOIL:

Formation:

Decomposition of ancient crystalline rocks like Granites and gneisses.

Chemical properties:

Rich in minerals such as iron and magnesium .

Poor in nitrogen, humus, lime and phosphoric acid.

Nature :

Light textured, porous friable presence of limited Soluble salts.

Distribution:

Eastern parts of Deccan plateau, southern states of Kerala, Tamil Nadu, Karnataka and Jharkhand.

Crops: Wheat and pulses.

LATERITE SOIL -6-

Formation:

Formed in the regions where alternate wet and hot dry conditions prevail.

Chemical properties:

Composed mainly of hydrated oxides of iron and Aluminium.

Nature:

More acidic in higher areas, poor in humus, cannot retain moisture.

In plains, it is clayey and retains moisture.

Distribution:

Assam hills, hills of Kerala and Karnataka and Eastern ghats and

Crops: Coffee and Rubber.

FOREST AND MOUNTAIN SOIL:

Formation:

Formed due to mechanical weathering caused by snow, rain, temperature variation.

Chemical properties:

Deficient in potash, phosphorus and lime.

Rich in humus.

Nature:

Light, sandy, thin and found with pieces of rock.

Distribution:

Jammu and Kashmir, Himachal Pradesh, Sikkim, Uttarakhand and Eastern and Western ghats.

Crops: Tea, coffee, potato.

Conclusion:

The rich, deep and fertile soils supports high density of population through agricultural prosperity.

2. What is multipurpose project and write any two multipurpose Projects of India?

Introduction:

Multipurpose project is a scientific management of water resources in India. Construction of dam across rivers is aimed at many purposes, such as irrigation, hydro power generation, water supply for drinking and industrial purposes, controlling floods, development of fisheries, navigation.

BHAKRA-NANGAL PROJECT:

This project is constructed across the river Sutlej.

It is the highest gravity dam in the world.

The states benefitted are the Punjab, Haryana and Rajasthan.

The area of irrigation is 52,609 sq.km.

It produces 1500 MW of hydro power.

HIRAKUD PROJECT:

This project is constructed across the river Mahanadi.

It is the largest dam in the world.

The state benefitted is Odisha.

The area of irrigation is 1,41,600 sq.km.

It produces 347.5 MW of hydro power.

CONCLUSION:

Majority of multipurpose projects are combination of Irrigation and hydro power which are the major aims of the projects.

3. Bring out the characteristics of Intensive and Plantation farming:

Introduction:

Agriculture plays a vital role in socio - economic development of India. It is a source of livelihood and food security for Indians.

INTENSIVE FARMING:

It is an agricultural intensification and mechanization system that aims to maximize yields from available land through various means, such as heavy use of pesticides and chemical fertilizers.

PLANTATION FARMING:

Plantation crops are cultivated in large estates on hilly slopes. They are cultivated for the purpose of export.

Tea, Coffee, Rubber and Spices are the major plantation crops of India.

CONCLUSION:

Agriculture constitutes large share of country's national income because more than half of India's workforce is employed in agriculture.

4. Examine geographical conditions favourable for the cultivation of Rice and wheat.

Intro:- The major food crops cultivated in India are Rice and wheat.

Rice:-

- It is a tropical crop.
- It requires temperature of 24°C and annual rainfall of 150 cms.
- It is grown well in deep fertile clayey or loamy soil.
- It requires abundant cheap labour
- (i) Broadcasting (ii) ploughing or drilling and (iii) Transplanting are the 3 methods to cultivate Paddy.

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• The major rice producing states are Tamilnadu, Andhra Pradesh, West Bengal, Uttar Pradesh etc.

Wheat :-

temperature of

• It requires $10^{\circ}-50^{\circ}\text{C}$ at the time of sowing and $20^{\circ}-25^{\circ}\text{C}$ at the time of harvesting.

• The major wheat growing regions are Uttar Pradesh, Punjab, Haryana, Rajasthan, Madhya Pradesh and also in Black soil regions of the Deccan.

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