

SOIL

CLASS 7

- 1. Soil is a dark brown solid material which is a mixture of rock particle of various sizes and humus.**
- 2. Important uses of soil are:**
 - A] It is used for growing food**
 - B] To grow trees**
 - C] To make bricks**
 - D] To make earthenware**
- 3. WEATHERING is a process by which huge rocks are broken down into small particles by the action of suns heat ,wind ,rain ,flowing water.it is a very slow process**
- 4. HUMUS is the organic matter formed by decomposition of dead plants and animals by the microorganisms .it contains nutrients which are needed by plants for their growth .**
- 5. SOIL PROFILE is a vertical section through the soil showing the different layers of the soil .**
- 6. SOIL PROFILE consist of three different layers of soil and each layer is called HORIZON**
 - A HORIZON[top soil]**
 - B HORIZON [sub soil]**
 - C HORIZON [sub stratum]**
- 7. A HORIZON**
 - It is the The top layer of soil**
 - It Contains many living things**
 - Humus makes the top soil very fertile**
 - It is the most useful part of the soil**
- 8. B HORIZON**
 - It is just below the top soil**
 - It contains very little living organisms**
 - It is less fertile**
 - It is rich in soluble minerals**
- 9. C HORIZON**
 - It is the layer just beow the subsoil**
 - It is Made up of partially weathered rocks**
- 10.COMPOSITION OF SOIL**

It is mainly made up of different sized rock particles and humus its six components are :

ROCK PARTICLES

MINERALS

HUMUS

AIR

WATER

LIVING ORGANISMS

11.The four groups of soil are:

Sand

Silt

Clay

Gravel

12.CLAY is the smallest rock particle present in soil

13.SILT is the rock particles in soil little larger than clay particles

14.SAND are the rock particles larger than silt and is coarser to touch

15.GRAVEL is the largest sized rock particle present in the soil

16.TYPES OF SOIL

SANDY SOIL : it consists of mainly sand and very little humus. It is found in desert areas. It cannot hold much water so it is not good for plants. It is not sticky. It cannot be used to make pots.

CLAYEY SOIL : it contains clay, very little humus, has a very good water holding capacity but it is not able to trap enough water from the roots of the plant. It is sticky so it is used to make pots, bricks, statues. It is rich in minerals.

LOAMY SOIL : it is a mixture of sand, clay, silt and humus in the right proportions. It has right water holding capacity, adequate air spaces and sufficient amount of humus so it is the most fertile soil and best for growing crops.

17.CROPS GROWN IN DIFFERENT TYPES OF SOIL

CLAYEY SOIL AND LOAMY SOIL: wheat, gram

CLAYEY SOIL : rice

LOAMY SOIL : pulses

SANDY LOAMY SOIL : cotton crop

18.PROPERTIES

It contains air
It contains water
It can absorb water
It allows water to percolate

NOTE :: percolation means the process in which water passes down slowly through the soil .

Percolation rate =volume of water percolated/ time taken for percolation

Percolation rate is highest in sandy soil and lowest in plain soil

The soil with low percolation rate is most suitable for growing rice

19.VEGETATION means all plants growing on the surface of earth .

20.SOIL EROSION means removal of fertile top soil from land by wind or water

21.CAUSES OF SOIL EROSION it is caused by large scale cutting down of forest trees and other plants

22.EFFECT OF SOIL EROSION

It can turn lush green forest into desert

It can lead to famines

It can cause floods

23.PREVENTION OF SOIL EROSION

It can be prevented by preventing large scale cutting down of forest trees .

Large scale growing of forest trees

By planting more trees

24.SOIL POLLUTION

25.It is caused by dumping of waste material, by using pesticides in agriculture, by acid rain ,by dumping industrial wastes

26.PREVENTION OF SOIL POLLUTION

Use of polythene bags should be avoided

Use of pesticides should be minimised

Industrial waste should be treated properly before dumping it into the soil .

