

**SOIL**

**CHAPTER-9**

# Introduction

- ***Natural resources***

**The substances which come from natural environment and can exist without the action of mankind.**

- ***Examples***

**Rivers, mountains, plants, animals, minerals; soil are important natural resources.**





# Importance Of Soil

- It holds the root of the plants for support of the plant and root absorbs nutrient and water from soil for the growth of plants.
- Many macro and microorganisms live in the soil.
- Soil is required for agriculture and in turn agriculture provides food, cloth and shelter for all living organisms.



# **Nature of soil**

- When rocks break down by the action of wind, water or any other source, it forms small particles which together form soil and this process of formation of soil is called weathering of soil.**
- Nature of a soil depends upon from which rock it has been formed that is the parent rock. For example, rock which contains silica forms only sandy soil.**

- **Nature of a soil also depends upon the vegetation that has been grown upon it. For example, pedalfer a fertile and black soil forms where there is more of deciduous forest.**



**Formation of soil by weathering of rocks**

# **Soil horizon**

- **Different layers of soil are called soil horizons.**
- **Each layers of soil have different texture and color, different depth and varying chemical composition.**
- **Layers of soil can be seen while digging a well or when the foundation of a building is laid.**



# HUMUS

- Humus is the rotting dead matter present in the soil which makes the soil fertile.
- Plants absorb their nutrients from the humus in the soil.



**Humus**



# What pollutes the soil?

Leaves and  
Gross Clippings



Swimming pool  
chemicals



Hazardous  
chemicals



Soaps and  
detergents



Trash and  
Litter



Animal Waste



Dirt



Oil and other  
chemicals from cars



Air pollution  
from cars



Pesticides and  
Fertilizers



# PLENARY

**Q. In how many groups the soil has been categorised? Name them.**

**A. The soil has been categorised into four major groups, i.e. -**

- clay
- silt
- sand
- gravel

# **ASSESSMENT / EVALUATION**

**Q. Soil has particles of different sizes. Arrange the words given below in decreasing order of their particle size. Rock, clay, sand, gravel, silt.**

**A. The soil particles with the decreasing order of their particle sizes can be shown as**

**Rock > gravel > sand > silt > clay**

**Q. There are two components of soil one that comes from living thing and other from non-living thing. What are these two components?**

**A. The two major components of soil are weathered rock particles, i.e. non-living components and humus that consists of living organisms like fungi, bacteria, worm, insects, etc.**