KALPAVRUKSHA MODEL SCHOOL

Online class Assignments

Class: VII **Sub: Chemistry** **Date: 03.07.2021**

Topic: Soil

I. Answers for the following questions:

1. Define a) Soil profile b) Subsoil c) Top soil d) Humus

Ans: **a) Soil profile:** A vertical Section of soil from the ground surface to the parent rock that shows different layers of soil is called as Soil profile.

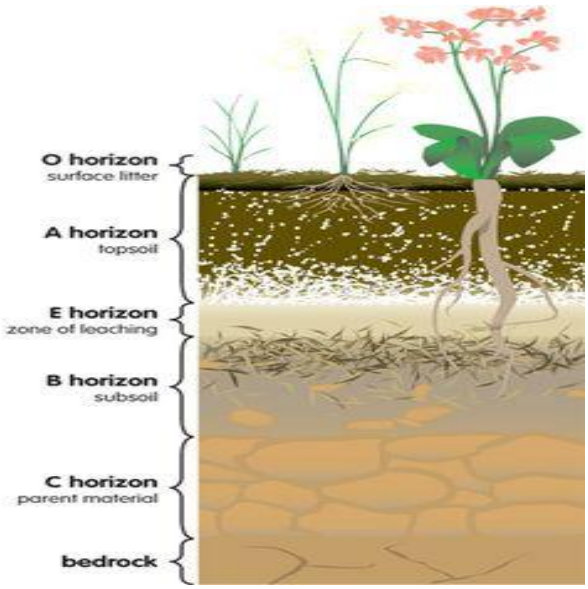
b) Subsoil: a subsurface soil layer that is immediately beneath the A horizon from which it obtains organic matter chiefly by illuviation and is usually distinguished by less weathering.

c) Top soil: The A horizon is the top layer of the mineral soil horizons, often referred to as 'topsoil'.

d) Humus: A layer of dead and decayed plants animal remains called humus.

2. With a neat labelled diagram explain Soil profile.

Ans:



Explanation:

O horizon or Organic: It lies above top soil and rich in organic matter.

A horizon or top soil: It is the uppermost layer of soil. It consists of fine particles. It is rich in humus so it is dark in colour. It is soft, porous and hold water.

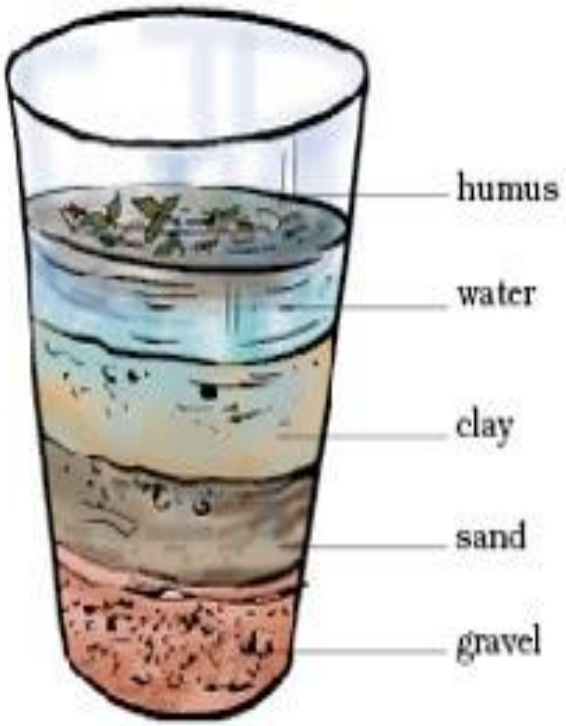
E horizon or Zone of leaching: The E horizon is a subsurface horizon that has been heavily leached. Leaching is the process in which soluble nutrients are lost from the soil due to precipitation or irrigation. The horizon is typically light in color. B horizon or sub soil: It is rich in minerals. These minerals seep down along with water. It also contains compactly packed fine particles of soil.

C horizon: It contains partially weathered rocks. It is characterized by cracks and crevices. It is very difficult to dig beyond this layer.

R horizon or Bedrock: It is the lowermost layer of soil. It mainly consists of parent rock. These rocks determine the composition of soil.

3. With a neat labelled diagram explain composition of soil.

Ans:



Explanation: The main constituent of soil are water, sand, clay, silt, pebbles, and humus. The difference in these constituents leads to the formation of different kinds of soils.