

Semester II

Chapter- 1

Soil Erosion and Conservation

Oral questions:

1. Why are all agricultural activities done in the top soil?

Ans1. Top soil contain humus which makes the soil fertile therefore, all the agricultural activities done in the top soil.

2. What is afforestation?

Ans2. Growing of trees on large scale is called afforestation.

3. How does overgrazing leads to soil erosion?

Ans3. When cattle graze on same land again and again they eat up most of the green grasses as result soil become loose and easily carried away by wind and water.

Science Quiz:

1. Name the uppermost layer of the soil?

Ans1. Topsoil is the uppermost layer of the soil.

2. Name two ways to conserve soil?

Ans2. Two ways to conserve soil are:

(a) Stop overgrazing (b) Afforestation

Very short answer:

1. What is soil erosion?

Ans1. The removal of top fertile soil from a region by wind, rain or river water is called soil erosion.

2. Name the constituents of soil?

Ans2. Soil consists of gravel, sand, clay, moisture (water) , humus , minerals and microorganisms.

Short answer questions:

1. How is soil useful for living beings?

Ans1. Soil is useful for living beings in many ways:

- (a) Soil provides optimum conditions for proper growth of plants.
- (b) Soil helps in storage of water which is utilised for drinking purposes.
- (c) Foods like cereals, pulses, fruits and vegetables are obtained directly from plants that grow in soil.

2. How does step farming help in soil conservation?

Ans2. Making steps reduces the speed of water as it flows down and therefore, reduces soil erosion. Also, the soil eroded from one step is deposited on the next step.

3. Reena was watering the plants of her garden by using a water pipe. A gardener saw and asked her to use watering can instead of water pipe.

(a) Why did the gardener ask to use water can instead of water pipe?

Ans3 (a) Gardener asked to use water can instead of water pipe because through water pipe, strong flow of water can remove top fertile soil whereas, through water can Reena prevent soil from being eroded and can also save water.

(b) What value has the gardener shown?

Ans (b) Gardener has scientific attitude towards saving the environment.

Long answer questions:

1. How is soil formed?

Ans1. Soil is formed by weathering of rocks

(a) During rains water gets into the cracks in rocks and remains there.

(b) In cold weather it freezes, exerts pressure and breaks the rocks.

(c) Repeated weathering over long period breaks the rocks into pieces it results in formation of soil.

2. How do forest help in conservation?

Ans2. The roots of trees that growing in the soil bind the soil particles together. Due to this the wind and water are not able to carry away the top soil easily. They act as soil binders hence, in this way forest help in soil conservation.

Think and answer:

1. How herbivores causes soil erosion?

Ans1. Herbivores like cow, goat, sheep etc. graze on land again and again. As a result the soil becomes loose and it can easily carried away by strong winds or running water and can cause soil erosion.

2. What would have happened if rocks had not broken down?

Ans2. If rocks would not have broken then the formation of soil would not have taken place. In absence of soil plants would not be grown. Without plants there would be no Oxygen and no life on Earth.

3. What is crop rotation?

Ans3. Cultivating two or more crops in succession on the same area of land over a period of time is known as crop rotation.

4. How do embankments help in soil conservation?

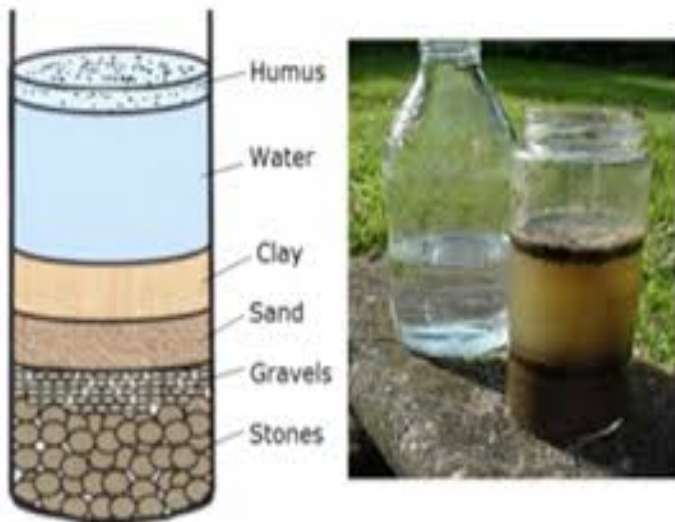
Ans4. Running water washes away top fertile soil during floods. If embankments are constructed on both the sides of a river or stream, it would help to prevent flood and prevent soil erosion.

5. Why is yellow river is known as sorrow of China?

Ans5. Yellow river is known as sorrow of China as it changes its direction and causes great loss to life and property.

Draw a labelled diagram of

1. Constituents of soil



2. Soil profile

