D. Differentiate between.

a. Erosion of soil conservation of soil

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| Erosion of soil | Conservation of soil |
| Removal of the upper fertile layer of soil. | Protection and preservation of soil. |
| Causes loss of nutrients. | Maintains soil fertility. |
| Caused by deforestation, overgrazing, etc. | Done by planting trees, terracing, etc. |

b. Erosion and Deposition

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| --- | --- |
| Erosion | Deposition |
| Wearing away and moving soil/rock. | Laying down soil/rock in a new place. |
| Removes material from a place. | Adds material to a place. |
| Caused by wind, water, glaciers. | Happens when moving agents slow down. |

c. Top soil and Sub Soil

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| --- | --- |
| Top Soil | Sub soil |
| It is the upper layer of soil . | It is the middle layer of soil. |
| It is rich in humus. | It is rich in mineral and  less in humus. |
| It is dark in color. | It is lighter in color |

E. Give reason.

1. Water resource help to form the soil.

Ans Because it is also a factor that affects the weathering of rocks.

2. Organic manure is suitable to enhance the quality of soil.

Ans Because it improves soil structure.

3. We should grow plant at bare hills.

Ans because it stops soil erosion and add greenery in the environment.

4. Erosion and deposition are associated each other.

Ans Because erosion carries soil and rocks from one place, and deposition drops them in another place.

F. Very short answer type questions.

1. What is the second uppermost layer of soil?

Ans The second uppermost layer of soil is subsoil.

2. What is weathering?

Ans The process of breaking down rocks into small particles to form soil is called weathering.

3. Define soil profile.

Ans A vertical section of soil that shows the layer is of soil is called soil profile.

4. What happens if the hazardous material mix in the soil?

Ans If the hazardous material mix in the soil, it will pollute the soil.

5. What kills the earthworm and bacteria in the soil?

Ans Chemicals and solid waste kills the earthworm and bacteria in the soil .

G. Short answer type questions.

1. What are the layers of soil in soil profile?

Ans The layers of soil in soil profile are:

a.Top soil

b.Sub soil

c. Soil base

2. How can roots of plants help in the formation of soil?

Ans Roots of plants help in the formation of soil by breaking rocks into small particles.

3. What are the causes of soil erosion?

Ans The causes of soil erosion are landslide and flood.

4. How can we conserve the soil erosion?

Ans We can conserve the soil erosion by planting trees in barren hills or stopping the overgrazing of animals .

5. How do pesticides degrades the quality of soil?

Ans Pesticides degrade the quality of soil by killing useful organisms, reducing fertility, and polluting it with harmful chemicals.

H. Long answer type questions.

1. What is soil? What are the soil profiles?

Ans Soil is the loose layer of matter which covers the Earth’s surface .It consist organic and inorganic particles.

- The soil profile is understanding the fertility and water-holding capacity of soil. These layers of soil profile are:

1. A Horizon (Topsoil) – The top layer, rich in organic matter and humus, dark in color, and fertile. Plants grow in this layer.
2. B Horizon (Subsoil) – Below the topsoil, containing minerals and clay but less organic matter. It is harder and lighter in color.
3. C Horizon(Soil base) – Made up of partly weathered rocks and very little organic matter.
4. Bedrock – The deepest layer, consisting of unweathered solid rock.

2. What is weathering? Describe the different methods of converting rock into soil.

Ans The process of breaking down rocks into small particles to form soil is called weathering.

The different methods of converting Rock into Soil are given below:

1. Physical weathering:

* Expansion and contraction due to temperature changes
* Wind and water erosion.

1. Biological weathering:

* Plant roots growing into cracks.
* Lichens and mosses producing acids.
* Burrowing animals breaking rocks.

3. Why should we preserve the soil? What are the methods of soil conservation?

Ans We should preserve the soil to grow healthy crops and get enough food and prevent loss of soil.

-Methods of Soil Conservation:

1. Planting trees and grass .
2. Avoiding overgrazing .
3. Using organic manure .

4. What makes the soil polluted? Discuss the causes, effects and controlling mechanism of soil pollution.

Ans The mixing of unwanted things in the soil makes soil polluted .

-The causes, effects and controlling mechanism of soil pollution are discusses below:

1. Causes of Soil Pollution:

1. Excessive use of chemical fertilizer.
2. Mixing of Industrial waste .

2.Effects of Soil Pollution:

1. Death of earthworm.
2. Water pollution
3. Soil erosion

3.Controlling Mechanisms:

1. Use organic or compost manure .
2. Manage the waste properly .
3. Treat waste before releasing it.

5. Why is polythene harmful for soil? The displacement issue of polythene frequently raise in the society. What is the reason behind it.

Ans Polythene is harmful for soil because polythene is inorganic and does not decompose easily and causes soil pollution .

-The disposal issue of polythene frequently raises concerns in society because polythene is widely used and often thrown away carelessly. Many people are unaware of the harmful effects of polythene on soil and environment.

-The reason behind the problem are:

1. Overuse of polythene products.

2. Lack of public awareness .