

Class: VII
Subject: Chemistry
Topic: Soil
No. of Questions: 22

1. What is the importance of organic matter in soil?
(a) It increases water absorbing capacity of soil.
(b) It increases water retaining capacity of soil.
(c) It helps to check soil erosion.
(d) All of these

Ans. (d)
Organic matter present in soil helps to increase the water absorbing capacity and water retaining capacity of soil. It also helps to check soil erosion.

2. Why wheat and rice are majorly grown in Punjab?

Ans. In Punjab, five rivers flow which brings alluvial soil with them. Alluvial soil is the most fertile soil which is suitable for the growth of wheat and rice.

3. (i) Which B - horizon has highest mineral content and why?
(ii) How soil is important for plant growth?

Ans. (i) B- horizon has highest mineral content because when rainwater seeps through the topsoil, it dissolves minerals and deposits them in this layer.

(ii) Soil is necessary for plant growth because

a. It provides mechanical support to plants.

b. It provides water and nutrients to the plants

4. Why loamy soil is considered a healthy soil?

Ans: Loamy soil is considered a healthy soil because

a. It is rich in humus.

b. It has neutral pH.

c. It is rich in minerals.

- d. It has good water absorbing and water retaining capacity.
- e. It is well aerated.

5. Which soil is best for growing masoor dal and why?

Ans. Loamy soil is best for growing masoor dal because it drains water easily.

6. List any two properties of healthy soil.

Ans: The two characteristics of healthy soil are:

- a. It is a mixture of different sized particles.
- b. It is rich in humus.

7. Why alluvial soil is suited for growth of wheat and rice?

Ans. Alluvial soil is rich in humus and is loamy in texture. Thus it is suitable for growth of wheat and rice.

8. How ground water gets recharged?

Ans. Rain water seeps through the soil towards bed rock where it gets collected and thus recharges ground water.

9. How humus prevents soil erosion?

Ans. Humus helps the soil to absorb surface water quickly and retain it. Thus, the soil remains wet and prevents soil erosion.

10. Why clay is not suitable for growing plants?

Ans. Clay has smallest sized particles (less than 0.002 mm) thus it has very less soil air due to small intermolecular spaces. Its water absorbing and retaining capacity is very high thus it becomes waterlogged.

11. What are the properties of desert soil?

Ans. The properties of desert soil are:

- a. Soil is sandy and porous.

- b. It is rich in soluble salts.
- c. It has poor water retention capacity.

12. Does the pH of soil affects fertility of soil?

Ans. Yes, pH of soil affects the fertility of soil as plants cannot grow in acidic or alkaline soil.

13. (i) Why major plantation of coconut is found in western ghats and eastern ghats?

(ii) Which constituent of mountain soil makes it fertile?

Ans. (i) Major plantation of coconut is found in western and eastern ghats because it has lateritic soil which is most suitable for the growth of coconuts.

(ii) Mountain soil is made up of sand, stones, clay limestone. It has the highest content of humus of all the soil types. This makes mountain soil very fertile.

14. How texture of soil affects soil fertility?

Ans. Soil texture is determined by size of constituent particles of soil. It determines three things:

- a. Air space.
- b. Water absorbing capacity of soil.
- c. Water retaining capacity of soil.

Thus, it affects the fertility of soil.

15. Which properties of soil determine fertility of soil?

Ans. Following are the properties of soil which help in determining fertility of soil:

- a. Aeration.
- b. pH of soil.
- c. Water absorbing and water retaining capacity of soil.
- d. Amount of minerals and humus in soil.

16. Which factors are common for weathering and erosion?

Ans. Wind and water are common agents for weathering and erosion.

17. How soil is classified on the basis of formation and occurrence?

Ans. Soil is of three types on the basis of formation and occurrence. These are:

a. Residual soil:

This type of soil remains at its place of formation. Example - red soil.

b. Transported soil:

This type of soil is transported to distant places from its origin by various agents of erosion like wind, water like alluvial soil.

c. Mountain soil:

It is found in Himalayan region and northeastern states.

18. How terrace farming helps in reducing soil erosion?

Ans. In terrace farming, hill slopes is cut into steps. This reduces the speed of water on hill slopes and reduces soil pollution.

19. What is the importance of soil water?

a. It seeps to water table

b. It helps in ploughing field

c. It has dissolved nutrients

d. It has air

Ans. (c) It has dissolved nutrients

20. Which of these are the characteristics of mountain soil?

a. Rich in humus

b. Fertile

c. Acidic

d. All of these

Ans. (d) All of these

21. What is the drawback of clayey soil?

a. It does not provide air to the plant roots.

b. It becomes water logged.

c. It is rich in humus.

d. It does not provide air to the plant roots and also becomes water logged.

Ans. (d)

Clayey soil has less air spaces and so, it does not provide much air for the breathing of roots of plants. It has high water retaining capacity which often makes the soil water logged.

22. How black soil is formed?
- Due to deposition of soil by river
 - Weathering of volcanic rocks
 - Due to weathering of substratum
 - None of these

Ans. (b)

Weathering of volcanic rocks

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