

Chapter 2: Land, soil, Water, Natural Vegetation and Wildlife Resources

Question 1: Answer the following questions.

(i) Which are the two main climatic factors responsible for soil formation?

Answer: The two main climatic factors responsible for soil formation are :-

- Temperature
- Rainfall

(ii) Write any two reasons for land degradation today.

Answer: The reasons for land degradation are :-

- deforestation on a large scale
- overuse of chemical fertilizers
-

(iii) Why is land considered an important resource?

Answer: Land is considered an important resource because it can be used for various purposes like agriculture, forestry, mining, building houses, roads, and building industries.

(iv) Name any two steps that government has taken to conserve plants and animals.

Answer: The two steps that the government has taken to conserve plants and animals are :-

- Constructing national parks, wildlife sanctuaries, biosphere reserves to protect our natural vegetation and wildlife.
- An international convention CITES has been established that lists several species of animals and birds in which trade is prohibited.

(v) Suggest three ways to conserve water.

Answer: Three ways to conserve water are :-

- Rainwater harvesting.
- Use of sprinklers for irrigation.
- Drip or trickle irrigation in dry regions.

Question 2: Tick the correct answer.

(i) Which one of the following is NOT a factor of soil formation?

- (a) time
- (b) soil texture
- (c) organic matter

(ii) Which one of the following methods is most appropriate to check soil erosion on steep slopes?

- (a) shelter belts
- (b) mulching
- (c) terrace cultivation

(iii) Which one of the following is NOT in favour of the conservation of nature?

- (a) switch off the bulb when not in use
- (b) close the tap immediately after using

(c) dispose polypacks after shopping

Answers :-

(i) (b) soil texture

(ii) (c) terrace cultivation

(iii) (c) dispose polypacks after shopping

Question 3: Match the followings.

| | |
|-----------------|---|
| (i) Land use | (a) prevent soil erosion |
| (ii) Humus | (b) narrow zone of contact between the lithosphere hydrosphere and atmosphere |
| (iii) Rock dams | (c) productive use of land |
| (iv) Biosphere | (d) organic matter deposited on top soil |
| | (e) contour ploughing |

Answers :-

| | |
|-----------------|---|
| (i) Land use | (c) productive use of land |
| (ii) Humus | (d) organic matter deposited on top soil |
| (iii) Rock dams | (a) prevent soil erosion |
| (iv) Biosphere | (b) narrow zone of contact between the lithosphere hydrosphere and atmosphere |

Question 4: State whether the given statement is true or false.

If true, write the reasons.

(i) Ganga–Brahmaputra plain of India is an overpopulated region.

Answer : True.

Ganga Brahmaputra plain of India is an overpopulated region because this plane provides suitable land for living. The soil is very fertile and hence suitable for agriculture.

(ii) Water availability per person in India is declining.

Answer : True.

The water availability per person in India is declining because of the increasing population. The needs or demands of the people are increasing and hence the wastage of water and pollution is also increasing.

(iii) Rows of trees planted in the coastal areas to check the wind movement is called intercropping.

Answer : False.

Rows of trees planted in the coastal areas to check the wind movement is called shelterbelts.

(iv) Human interference and changes of climate can maintain the ecosystem.

Answer : False.

Human interference and changes in climate affects the balance of the ecosystem.

5. Activity

Question : Discuss some more reasons which are responsible for changes of land use pattern. Has your place undergone any change in the land use pattern in recent

years.

Answer :

1. Rapid increase in population as well as the increase in their demands have resulted into changes in the land use pattern.
2. Urbanization is also a reason.
3. Large scale forests have been destructed to expand land for cultivation.
4. Rapid industrialization has also changed the land use patterns in India.

Yes, the grounds that were used for playing for children are now occupied to build infrastructures.

Intext Questions

Activity

Question : An average urban Indian uses about 150 litres of water every day.

| Use | Litres per person per day |
|------------------|---------------------------|
| Drinking | 3 |
| Cooking | 4 |
| Bathing | 20 |
| Flushing | 40 |
| Washing clothes | 40 |
| Washing utensils | 20 |
| Gardening | 23 |
| Total | 150 |

Can you suggest some ways to bring down this amount?

Answer:

Spread awareness about the importance of water.

Use of small flush tanks.

Use only required amount of water for washing and cleaning.

Activity

Question : Read the news item and find out how fire started in California? Could it be avoided?

Answer: The cause of the massive fire in California was the carelessness of a kid. The kid dropped the burning matchstick on the grass and it resulted in the burning of the whole forest. Yes, it could have been avoided. Childrens should be taught about the things which can cause a great harm to the environment. They should have a knowledge about the safety methods and precautions that should be taken regarding the environment.

Activity -

Question : In India soils could be alluvial, black, red, laterite, desertic and mountain soil. Collect a handful of different types of soil and observe. How are they different?

Answer:

- Alluvial soils are loamier and more clayey in nature. The colour of the alluvial soils varies from the light grey to ash grey.

- Black cotton soil (regur soil) is highly clayey. It is deep and impermeable and thus has high water retention capacity. These soils are black in colour.
- Res soil's texture varies from sand to clay and loam. The soil develops a reddish colour due to a wide diffusion of iron in crystalline and metamorphic rocks.
- Laterite soils are widely used as bricks because they are hard. They are Reddish brown in colour.
- Desert soils are sandy and gravelly. Desert soils may be gray-colored, brown, or even brick red.
- The texture of mountain soils can be loamy, clayey. Their colour is dark brown.

Champstreet