

**GEOGRAPHY CH 2 Land, Soil, Water, Natural Vegetation and
Wildlife Resources**

Answer the given questions in a word or a sentence (1 mark each).

- 1. Which country has the highest percentage of land under forest?**

Ans. Japan.

- 2. Define land use.**

Ans. Land is used for different purposes such as agriculture, forestry, mining, building houses, roads and setting up of industries. This is commonly termed as Land use.

- 3. List any two factors of soil formation.**

Ans. Parent rock and time.

- 4. What are the threats to soil as a resource?**

Ans. Soil erosion and depletion are the major threats to soil as a resource.

Short answer type questions (3marks each):

- 1. What are the reasons for shortage of water?**

Ans. 1. Due to overpopulation, industrialization and urbanization, the consumption of water has increased manifold.

- 2. Increased agricultural production to meet the growing needs of the population, modern lifestyle of the people and greater use of electricity in industries has resulted in water scarcity in many parts of the world.**

3. Above all the pollution of water bodies is due to irresponsible and reckless attitude of mankind. This has reduced the availability of fresh water for human consumption.

2. Explain any three methods which can be adopted to control soil erosion.

Ans. A. Mulching: The bare ground between plants is covered with a layer of organic matter like straw. It helps to retain soil moisture.

B. Contour barriers: Stones, grass, soil are used to build barriers along contours. Trenches are made in front of the barriers to collect water.

C. Rock dam: Rocks are piled up to slow down the flow of water. This prevents gullies and further soil loss.

3. What is land degradation? Suggest any two measures to control land degradation.

Ans. Decline in the productive capacity of land for some time or permanently is known as land degradation. Some of the measures that can be used or practiced to conserve our land resource are:

(a) Adopting to the scientific techniques.

(b) Land Reclamation.

(c) Regulated use of chemical fertilizers, insecticides and pesticides.

(d) Afforestation.

(e) Check on Overgrazing.

(f) Control of Mining Activities.

(g) Proper irrigation facilities.

(h) Constructing retention walls in the mountain areas to stop landslides. (Any 2 measures)

4. What are landslides? Mention any two mitigation techniques of landslides.

Ans. Landslides are simply defined as the mass movement of rock, debris or earth down a slope. They often take place in conjunction with earthquakes, floods and volcanoes.

- Hazard mapping to locate areas prone to landslides. Hence, such areas can be avoided for building settlements.**
- Construction of retention wall to stop land from slipping.**
- Increase in the vegetation cover to arrest landslide.**
- The surface drainage control works to control the movement of landslide along with rain water and spring flows. (Any 2 mitigation techniques)**

Long answer type questions (5 Marks each):

1. Why do we need to conserve water? Discuss methods to conserve water.

Ans. Access to clean and adequate water sources is a major problem facing the world today. Steps have to be taken to conserve this dwindling resource.

Methods to Conserve Water :

1. Discharge of untreated or partially treated sewage, agricultural chemicals and industrial effluents in water bodies are major contaminants. Water pollution can be

controlled by treating these effluents suitably before releasing them in water bodies.

2. Forest and other vegetation cover slow the surface runoff and replenish underground water.
 3. Water harvesting is another method to save surface runoff.
 4. The canals used for irrigating field should be properly lined to minimise losses by water seepage.
 5. Sprinklers effectively irrigate the area by checking water losses through seepage and evaporation. In dry regions with high rates of evaporation, drip or trickle irrigation is very useful. (Any 4 methods)
2. Define ecosystem? How do plants and animals help in maintaining a balance in the ecosystem?

Ans. In the biosphere living beings are inter-related and interdependent on each other for survival. This life supporting system is known as the ecosystem.

Role of animals :

1. They provide us milk, meat, hides and wool.
2. Insects like bees provide us honey, help in pollination of flowers and have an important role to play as decomposers in the ecosystem.
3. The birds feed on insects and act as decomposers as well. Vulture due to its ability to feed on dead livestock is a scavenger and considered a vital cleanser of the environment. (Any 2)

Role of Plants:

1. Plants provide us with timber, give shelter to animals, produce oxygen we breathe, protects soils.

2. Plants help in storage of underground water, give us fruits, nuts, latex, turpentine oil, gum, medicinal plants and also paper. (All 2)

3. What are the factors affecting the growth of natural vegetation? Describe the major vegetation types found in the world.

Ans. The growth of natural vegetation depends on moisture and temperature.

Major vegetation types found in the world are :

The major vegetation types of the world are grouped as forests, grasslands, scrubs and tundra.

- 1. Forests- In areas of heavy rainfall, huge trees may thrive. The forests are thus associated with areas having abundant water supply.**
- 2. Grasslands- As the amount of moisture decreases the size of trees and their density reduces. Short stunted trees and grasses grow in the regions of moderate rainfall forming the grasslands of the world.**
- 3. Thorny shrubs and scrubs- grow in dry areas of low rainfall. In such areas plants have deep roots and leaves with thorny and waxy surface reduce loss of moisture through transpiration.**
- 4. Tundra vegetation – Tundra vegetation of cold Polar Regions comprise of mosses and lichens.**

4.State the processes which have accelerated the loss of forest and wildlife. What steps should be taken to conserve the forests and wildlife?

Ans. Deforestation, soil erosion, constructional activities, forest fires, tsunami and landslides are some of the human and natural factors which accelerate the process of extinction of these resources. One of the major concerns is the poaching which result in a sharp decline in the number of particular species.

Steps to Conserve Forests and Wildlife :