

## Very Short Answer Questions

**Q. 1. What is land?**

**Ans.** Land is among the most important natural resources. Land covers about 30% of the total area of the earth's surface.

**Q. 2. What do you mean by land use?**

**Ans.** Land use refers to the use of land for different purposes such as agriculture, forestry, mining, building houses, etc.

**Q. 3. Define private land.**

**Ans.** Private land refers to the part of land owned by an individual or group of individuals like land used for personal purposes only (house).

**Q. 4. What do you mean by community land?**

**Ans.** Community land is owned by the community for common uses like collection of fodder, medicinal herbs. These community lands are also called common property resources.

**Q. 5. What is the difference between deforestation and afforestation?**

**Ans.** Deforestation refers to the action of cutting down trees, whereas afforestation refers to the action of planting trees.

**Q. 6. What do you mean by conservation of land resources?**

**Ans.** Conservation of land resources refers to the use of land properly and carefully, so that we can save our land resources for future generations.

**Q. 7. Define landslides.**

**Ans.** Landslides refer to the mass movement of rock, debris or earth down a slope. They often take place in conjunction with earthquakes, floods and volcanoes.

**Q. 8. Write the definition of soil.**

**Ans.** Soil is the thin layer of grainy substance covering the surface of the earth. It is made up of organic matter, minerals and weathered rocks found on the earth.

**Q. 9. What is weathering?**

**Ans.** The breaking up and decay of exposed rocks by temperature changes, frost action, plants, animals and human activity is called weathering.

**Q. 10. Explain the term soil erosion.**

**Ans.** Soil erosion refers to the removal of top soil by running waters, winds and glacier or human action.

**Q. 11. What do you mean by degradation of soil?**

**Ans.** Soil erosion and depletion are the major threats to soil as a resource. Both human and natural factors can lead to degradation of soils.

**Q. 12. What is the importance of water resources?**

**Ans.** Water is a vital renewable natural resource. Humans use large amounts of water not only for drinking and washing but also in processes of production like agriculture, industries, generating electricity, etc.

**Q. 13. Explain natural vegetation.**

**Ans.** Natural Vegetation refers to the group of plants which grow in an area without the interference of human beings.

**Q. 14. What is wildlife?**

**Ans.** Wildlife includes animals, birds, insects, aquatic life forms which live in their natural habitat.

**Q. 15. Describe the various types of natural vegetation.**

**Ans.** The various types of natural vegetation are as follows:

- (i) Forest
- (ii) Grasslands
- (iii) Shrubs and Tundra

**Q. 16. What is ecosystem?**

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

**Q. 17. What do you understand by 'rainwater harvesting'?**

**Ans.** It is the process of collecting rainwater from roof tops and directing it to an appropriate location where it is stored for future use.

**Q. 18. What is 'biosphere'?**

**Ans.** Natural vegetation and wildlife exists only in the narrow zone of contact between lithosphere, hydrosphere and atmosphere that is called 'biosphere'.

**Q. 19. Which regions in the world face water scarcity?**

**Ans.** Most of Africa, West Asia, South Asia, parts of Western USA, North-west Mexico, parts of South America and entire Australia are facing shortage in fresh water supply.

**Q. 20. What is a 'National Park'?**

**Ans.** A natural area designated to protect both flora and fauna for the present and future generation is called a National Park.

**Q. 21. What does 'biosphere reserve' mean?**

**Ans.** Series of protected areas linked through a global network, intended to demonstrate the relationship between conservation and development is called biosphere reserve.

## Short Answer Questions

**Q. 1. Name the factors affecting land use.**

**Ans.** The factors affecting land use are:

- (i) Physical feature
- (ii) Types of rocks
- (iii) Private and community land
- (iv) Climate
- (v) Time
- (vi) Parent rock
- (vii) Flora, fauna and micro-organism.

**Q. 2. What are the major threats to the environment?**

**Ans.** The major threats to the environment are:

- (i) Land degradation
- (ii) Landslides
- (iii) Soil erosion
- (iv) Desertification
- (v) Overgrazing
- (vi) Change in landforms
- (vii) Construction activities
- (viii) Expansion of agriculture

**Q. 3. What are the common methods used to conserve land resources?**

**Ans.** The common methods used to conserve land resources are:

- (i) Afforestation
- (ii) Land reclamation
- (iii) Regulated use of chemical pesticides and fertilisers
- (iv) Checks on overgrazing

**Q. 4. Explain the mitigation techniques of landslides.**

**Ans.** The mitigation techniques of landslides are:

- (i) Hazard mapping to locate areas prone to landslides.
- (ii) Construction of retention walls to stop land from slipping.
- (iii) Increase in the vegetation covers to arrest landslide.

**Q. 5. Explain the soil profile.**

**Ans.** Soil is made up of four layers which are:

- (i) **Top soil:** It contains humus and vegetation.

**(ii) Sub soil:** It is the second layer and consists of sand, silt and clay.

**(iii) Fragmented rock material:** It is the third layer and is made up of weathered rock material.

**(iv) Parent rock:** It is the solid unweathered rock.

**Q. 6. Write the factors of soil formation.**

**Ans.** The major factors of soil formation are:

**(i)** Nature of the Parent rock

**(ii)** Relief

**(iii)** Flora, fauna and micro-organism

**(iv)** Climate

**(v)** Time

**Q. 7. Name some methods of soil conservation.**

**Ans.** The methods of soil conservation are:

**(i)** Mulching

**(ii)** Contour barriers

**(iii)** Rock dam

**(iv)** Terrace farming

**(v)** Inter cropping

**(vi)** Contour ploughing

**(vii)** Shelter belts.

**Q. 8. Mention the factors which lead to soil degradation?**

**Ans.** The factors which lead to soil degradation are as follows:

**(i)** Deforestation

**(ii)** Overgrazing

**(iii)** Overuse of chemical pesticides and fertilisers

**(iv)** Rain wash

**(v)** Landslides

**(vi)** Floods

**Q. 9. Explain 'Water Cycle'.**

**Ans.** Water cycle includes three atmospheric processes which are evaporation, condensation and precipitation of water from earth's surface. It is in constant motion, cycling through the oceans, the air, the land and back again, through the processes of evaporation, precipitation and run-off.

## Long Answer Questions

### Q. 1. How can we conserve water?

**Ans.** By the following ways we can conserve water:

- (i) Efficient use of water.
- (ii) Rain water harvesting.
- (iii) Forest and other vegetation cover slow the surface runoff and replenish underground water.
- (iv) Sprinklers irrigation by checking water losses through seepage and evaporation.
- (v) Canals used for irrigating fields should be lined to minimise losses by water seepage.

### Q. 2. Classify land on the basis of ownership.

**Ans.** (i) Land can be classified on the basis of ownership as

- a. Private land
- b. Community land

(ii) Private land is owned by individuals whereas community land is owned by the community for common uses like collection of fodder, fruits, nuts or medicinal herbs.

(iii) These community lands are also called 'Common Property Resources' .

### Q. 3. How can we conserve natural vegetation and wildlife?

**Ans.** We can conserve natural vegetation and wildlife by the following ways:

(i) Natural parks, wildlife, national parks, wildlife sanctuaries and biosphere reserves are made to protect our natural flora and fauna.

(ii) Conservation of creeks, lakes and wetlands is also necessary to save the precious resource from depletion.

(iii) Encouragement of awareness programmes like social forestry and Vanmahotasava.

(iv) School children should be encouraged to bird watch and visit natural camps to appreciate the habitat of varied species.

**Q. 4. Elaborate the methods of soil conservation.**

**Ans.** Some methods of soil conservation are:

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

(ii) **Rock Dams:** Rocks are piled up to slow down the flow of water. This prevents gullies and further soil loss.

(iii) **Intercropping:** Different crops are grown in alternate rows and are sown at different times to protect the soil from rain wash.

(iv) **Shelter belts:** Rows of trees are planted to check the wind movements to protect soil cover.

(v) **Contour barriers:** Stones, grass and soil are used to build barriers along contours. Trenches are made in front of them to collect water.

(vi) **Terrace farming:** Broad flat steps or terraces are made on the steep slopes so that flat surfaces are available to grow crop. It reduces the surface runoff and soil erosion.

(vii) **Contour ploughing:** Ploughing parallel to the contours of a hill slope to form a natural barrier for water to flow down the slope.

**Q. 5. How can conservation of water resources be done?**

**Ans. (i)** Forest and other vegetation cover slow the surface run off and replenish underground water.

**(ii)** Water harvesting is another method to save surface runoff.

**(iii)** The canals used for irrigating field should be properly lined to minimise losses through seepage and evaporation.

**(iv)** In dry regions with high rates of evaporation, drip or trickle irrigation is very useful.



## Hots (Higher Order Thinking Skills)

### Q. 1. Briefly describe CITES.

**Ans.** CITES means the Convention on International Trade in Endangered Species of wild Fauna and Flora. It is an international agreement between governments that lists that, there are several species of animals and birds in which trade is prohibited. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Roughly 5,000 species of animal and 28,000 species of plants are protected.

**Examples:** Bears, Dolphins, Cacti, Corals, Orchids and Aloes.

### Q. 2. Write a note on distribution of natural vegetation.

**Ans.** The distribution of natural vegetation has been classified into three types:

- i. Forests
- ii. Grasslands
- iii. Scrubs and Tundra

**(i) Forests:** Forests are associated with areas having abundant water supply. Forests consist of two divisions which are evergreen and deciduous.

Evergreen forests do not shed their leaves simultaneously in any season of the year.

Deciduous forests shed their leaves in a particular season to conserve loss of moisture through transpiration.

**(ii) Grasslands:** It refers to the short stunted trees and grasses that grow in the regions of moderate rainfall.

**(iii) Scrubs and Tundra:** Scrubs and thorny shrubs grow in dry areas of low rainfall. In these areas, plants have deep roots and leaves with thorny and waxy surface that reduce loss of moisture through transpiration. They are found in dry deserts.

**Tundra vegetation:** They are mainly found in cold Polar Regions and comprise mosses and lichens. These areas are covered with snow throughout the year.