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**CHAPTER -2**

**LAND, SOIL, WATER, NATURAL VEGETATION AND WILDLIFE RESOURCES**

Qs1. About what percentage of the total area of the Earth’s surface is covered by land?

Ans. Thirty percent.

Qs 2. Name some areas of the World which are sparsely populated or uninhabited.

Ans. 1. Rugged topography

2. Steep slopes of the mountains

3. Low-lying areas susceptible to water logging

4. Desert areas

5. Thick forested areas.

Qs 3. About what percentage of the World’s surface is either sparsely populated or uninhabited?

Ans. Seventy percent.

Qs 4. Name some densely populated areas of the World.

Ans. Since plains and river valleys offer suitable land for agriculture, they are the densely populated areas of the World.

Qs 5. What are the various purposes of land?

Ans. Land is used for:-

1. Agriculture
2. Forestry
3. Mining
4. Building Houses
5. Building roads
6. Setting up industries.

Qs 6. Which physical factors determine the use of land?

Ans. 1. Topography

2. Soil

3. Climate

4. Minerals

5. Availability of water.

Qs 7. Which human factors are determinants of land use pattern?

Ans. Population and technology.

Qs 8. What are the different classifications of land?

Ans. 1. Private land

2. Community land.

Qs 9. \_\_\_\_\_\_\_\_ Land is owned by individuals.

Ans. Private.

Qs 10. Community land is owned by \_\_\_\_\_\_.

Ans. Community.

Qs 11. What are the uses of Community land?

OR

Why is community land also known as Common property resources?

Ans. It is used for common uses like collection of fodder, fruits, nuts or medicinal herbs.

Qs 12. Community lands are also called \_\_\_\_\_\_\_\_.

Ans. Common property resources.

Qs 13. What are the threats caused by expansion of agriculture and constructional activities to the environment?

Ans. 1. Land degradation

2. Landslides

3. Soil Erosion

4. Desertification.

Qs 14. Why people started encroaching the common land?

Ans. They did so to build up the commercial areas, housing complexes in the urban areas and to expand the agricultural land in the rural areas.

Qs 15. Why the rate of degradation of land resources need to be checked?

Ans. This should be done because the growing population and their ever growing demands has led to a large-scale destruction of forest cover and arable land and has created a fear of losing this natural resource.

Qs 16. Name some methods which are used to conserve land.

Ans. 1. Afforestation

2. Land reclamation

3. Regulated use of chemical pesticide and fertilizers

4. Checks on overgrazing.

Qs 17. What is soil?

Ans. It is the thin layer of grainy substance covering the surface of the Earth.

Qs 18. What is soil made up of?

Ans. Soil is made up of organic matter, minerals and weathered rocks found on the Earth.

Qs 19. What mixture makes the soil fertile?

Ans. The right mix of minerals and organic matter make the soil fertile.

Qs 20. (Imp) What are the factors affecting soil formation?

Ans. 1. Parent Rock: It determines the colour, texture, chemical properties, mineral, content and permeability.

2. Climate: It includes temperature, rainfall influence rate of weathering and humus.

3. Relief: It includes Altitude and slope. It determine the accumulation of soil.

4. Flora, Fauna and Micro-organisms: They affect the rate of humus formation.

5. Time: It determines the thickness of soil profile.

Qs 21. What human and natural factors can lead to soil degradation?

Ans. 1. Deforestation

2. Overgrazing

3. Overuse of chemical fertilizers or pesticides

4. Rain wash

5. Landslides

6. Floods.

Qs 22.(Imp) What are the methods of soil conservation?

Ans. 1. Mulching: The bare ground between plants is covered with a layer of organic matter like straw. It helps to retain soil moisture.

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

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

4. Terrace Farming: These are made on the steep slopes so that flat surfaces are available to grow crops. They can reduce surface run-off and soil erosion.

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

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

7. Shelter bells: In the coastal and dry regions, rows of trees are planted to check the wind movement to protect soil erosion.

Qs 23. How much percent of Earth’s surface is covered with water?

Ans. Three-fourth.

Qs 24. Why is Earth also called the “Water planet”?

Ans. It is called so because almost three-fourth of the Earth’s surface is covered with water.

Qs 25. How much percent is the Earth’s surface is covered with oceans?

Ans. Two-thirds.

Qs 26. Name some areas on Earth where fresh water can be found.

Ans. Ice sheets and glaciers in Antarctica, Greenland and mountain ranges.

Qs 27. Only \_\_\_ percent of freshwater is available and fit for human use.

Ans. 1%

Qs 28. Name the areas where the freshwater which is fit for human use can be found.

Ans. It can be found as:

1. Ground water
2. Surface water in rivers and lakes
3. Water vapour in atmosphere.

Qs 29. Why fresh water is the most precious substance on Earth?

Ans. It is because only 2.7% of the Earth contains freshwater out of which only 1% is available and fit for human use.

Qs 30. What are the factors which lead to the shortage in supply of fresh water?

Ans. 1.Increasing population

2. Rising demands for food and cash crops

3. Increasing urbanization

4. Rising standards of living.

Qs 31. How is water shortage caused?

Ans. It is caused as a consequence of variation in seasonal or annual precipitation or the scarcity is caused by over- exploitation and contamination of water sources.

Qs 32. We know that water is a renewable resource. Then why should it be conserved?

Ans. It should be conserved because its overuse and pollution makes it unfit for use.

Qs 33. Name some major contaminants of water.

Ans. 1. Discharge of untreated or partially treated sewage

2. Agricultural chemicals

3. Industrial effluents in water bodies.

Qs 34. How does the contaminants pollute water?

Ans. They pollute water with nitrates, metals and pesticides. Most of these chemicals being non-biodegradable reach human bodies through water.

Qs 35.(Imp) What are the various methods to conserve water resources?

Ans. 1. Industrial effluents should be treated suitably before releasing them in water bodies.

2. Water harvesting should be done to save surface run-off.

3. Water is used for irrigating fields. The canals should be properly lined to minimize losses by water seepage.

4. In dry regions with high rate of evaporation, grip or trickle irrigation is very useful.

Qs 36. Define 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.

Qs 37. Give some uses of plants.

Ans. Uses:

1. Provide us with timber
2. Give shelter to animals
3. Provide oxygen we breathe
4. Protects soils so essential for growing crops
5. Act as shelter belts
6. Help in storage of underground water
7. Give us fruits, nuts, latex, turpentine oil, gum, medicinal plants and also paper.

Qs 38. What does wildlife includes?

Ans. Wildlife includes animals, birds, insects as well as the aquatic life forms.

Qs 39. Give some uses of wildlife.

Ans. Uses:

1. They provide us milk, meat, hides and wool
2. Bees provide us honey
3. Bees help in pollination of flowers
4. Insects and birds acts as decomposers
5. Vultures due to their ability to feed on dead livestock is a scavenger and considered a vital cleanser of the environment.

Qs 40. Name the groups of major vegetation types of the world.

Ans. 1. Forests

2. Grasslands

3. Scrubs

4. Tundra.

Qs 41. What are the various types of forests?

Ans. 1. Evergreen forests

2. Deciduous forests.

Qs 42. \_\_\_\_\_\_ forests do not shed their leaves simultaneously in any season of the year.

Ans. Evergreen.

Qs 43.(Imp) Define deciduous forests.

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

Qs 44. What are the different types of deciduous forests?

Ans. Deciduous forests are classified into tropical or temperate based on their location in different latitudes.

Qs 45. Why natural vegetation and wildlife needs to be conserved?

OR

What are the various factors which lead to the need for conservation of wildlife and natural vegetation.

Ans. Factors:

1. Changes in climate and human interferences can cause the loss of natural habitats for plants and animals.
2. Many species have become vulnerable or endangered and some are on the verge of extinction.
3. Deforestation, soil erosion, constructional activities, forest fires, tsunami and landslides are some of the human made and natural factors which together accelerate the process of extinction.
4. The increasing incidents of poaching that result in a sharp decline in the number of particular species.

Qs 46.(Imp) What are the various ways to conserve wildlife and natural vegetation?

Ans. Ways:

1. Awareness programmes like social forestry and Vanamohatasava should be encouraged at the regional and community level.
2. School children should be encouraged for bird watching and visiting nature camps so that they appreciate the habitat of varied species.
3. Trades and killing of animals should be banned.

Qs 47.(Imp) What are the steps taken taken by the government to conserve wildlife and natural vegetation?

Ans. 1. Natural parks, wildlife sanctuaries, biosphere reserves are made to protect our natural vegetation and wildlife.

2. In India, killing of lions, tigers, deers, great Indian bustards and peacocks have been banned.