GE6351 EVS

Question Bank

UNIT – 3

2 Marks

1. Define Deforestation?

   Deforestation is the process of removal of (or) elimination of forests resources due to many natural or man-made activities. In general deforestation means destruction of forests.

2. What are all the types of Natural Resources?

   There are two types of natural resources,

   a. Renewable Resources (Solar,Wind,Thermal,Ocean)
   b. Non-Renewable Resources (Wood, Coal, Petroleum)

3. What are all the types of forests?

   According to the types of vegetation forests are classified into three categories.

   a. Evergreen Forests.
   b. Deciduous Forests.
   c. Coniferous Forests.

4. List some functions of forest.

   a. They are habitats to millions of plants and animals.
   b. It recycles the rainwater and removes pollutants from air.
   c. They control water quality and quantity.
   d. They moderate temperature and weather and help to maintain humidity.

5. What are all causes of over exploitation of forests?

   Over exploitation of forests wealth in developing countries occurs in the following ways,

   a. Increasing agricultural production.
   b. Increasing industrial activities.
   c. Increase in demand of wood resources.

6. What are all the environmental effects of deforestation?
   Deforestation has following social and environmental effects,

   a. Global warming.
   b. Loss of genetic diversity.
   c. Soil erosion.

d. Loss of biodiversity.
e. Loss of food grains.
f. Unemployment problems.
g. Flood and Landslides.

7. What is Dam? And list some effects of dam on forests.

Dams are manmade civil structures built across the river in order to store water for irrigation, hydroelectric power generation and flood control. Most of the dams are built to serve more than one purpose called “multi purpose dams”.

Effects on Forests:

1. Displacement of tribal people.
2. Loss of forest, flora and fauna.
3. Landslips, sedimentation and siltation occur.
4. Stagnation and water logging around reservoirs retards plant growth.

8. Classify the types of freshwater resources.

Freshwater Resources
- a. Surface water
  - i. Standing water bodies
    1. Lakes
    2. Reservoirs
    3. Estuaries
  - ii. Flowing water bodies
    1. Streams
    2. Rivers
- b. Under ground water

9. What is Ground Water?

The water, which is found available deep in the ground due to percolation of surface water, is called underground water. Under ground water is major source of water. It is pure and used for all purpose in the world.

10. What is aquifer? List the types of aquifers.

A layer of highly permeable rock containing water is called as aquifer.

Types of Aquifers

i. Unconfined Aquifers.
ii. Confined Aquifers.

11. List effects of over utilization of ground water.
    a. Decrease of ground water.
    b. Ground subsidence.
    c. Lowering of water table.
    d. Intrusion of salt water.
    e. Earthquake and landslides.
    f. Drying up of wells.
    g. Pollution of water.

12. Define Flood and Drought.

    Flood: A Flood is an overflow of water, whenever the magnitude of water exceeds the carrying capacit3y of channel within its banks.
    Drought: Drought is known as scarcity of water, which occurs due to inadequate rainfall, late arrival of rains and excessive withdrawal of ground water.

13. Define Food Resources.

    Food is an essential requirement for the human survival. Each person has minimum food requirement. The main components of food are carbohydrates, fats, proteins, minerals and vitamins.

14. What are all the problems we found in traditional agricultural methods?

    a. It involves very simple and inefficient tools for food production.
    b. Deforestation.
    c. Soil erosion.
    d. Loss of nutrients.

15. What is Renewable energy? List the ways to obtain this energy.

    Renewable energy resources are natural resources which can be regenerated continuously and are inexhaustible. They can be used again and again in an endless manner.
    a. Solar energy.
    b. Wind energy.
    c. Hydropower energy.
    d. Tidal energy.

16. Define Ocean Thermal Energy (OTE).

    There are often large temperature differences between the surface level and deeper level of tropical oceans. This temperature difference can be utilized to generate electricity. The energy available due to the difference in temperature of water is called ocean thermal energy.

17. Define Nuclear energy with 2 advantages and disadvantages.

The Atomic Reaction either nuclear fission or nuclear fusion releases large quantity of thermal power. This thermal power can be used to create steam and the steam is used to drive the turbine for power production. This is known as nuclear energy.

Advantages:

i. More stable source of power.
ii. It won't affected by weather conditions.

Disadvantages:

i. High cost maintenance is required.
iii. Radioactive waste is harmful to humans.

18. Define soil erosion and list some preventing methods.

Soil erosion is the process of removal of superficial layer of the soil from one place to another. Soil erosion also removes the soil components and surface litre.

Control methods:

1. Conservational till farming (or) no-till-farming.
2. Contour farming.
3. Terracing.
4. Alley cropping (or) Agro forestry.
5. Wind breaks (or) shelter belts.

PART - B

1. Explain in detail about Forest Resources with effects on environment by over exploitation forests.
2. Explain in detail about Water Resources with importance of groundwater and advantages, disadvantages of Dams Contractions.
3. Explain in detail about Energy Resources with Renewable and Non Renewable Energy Resources.
4. Explain in detail about Mineral Resources with effect on environments.
5. Explain in detail about Food Resources and with changes caused by overgrazing of agricultural activities.
6. Explain in detail about Nuclear Energy with advantages and disadvantages.
7. Explain in detail about land Resources and effects on environment when the over utilization process.

UNIT – 4

PART – A

1. List some ways to conserve the Energy.

    a. Switch off lights, fans and other appliances when not in use.
    b. Use solar heater for cooking.
    c. Use of pressure cooker.
    d. Growing trees and minimizing usage of A/C.

2. List some ways to conserve Water.

    a. Use minimum water for domestic purpose.
    b. Periodical checks for water leaks in pipes.
    c. Reuse of water.
    d. Rainwater harvesting system.

3. Define sustainable development.

    Sustainable development is the development of healthy environment without damaging the natural resource. In other words, all the natural resources must be used in such way that it must be available for the future generation also.

4. Define unsustainable development.

    Unsustainable development is the degradation of the environment due to over utilization and over exploitation of the natural resources.

5. What are all the causes for un-sustainability?

    a. Over population in poor countries, consume too low resources with low income.
    b. A rich country consumes more resources with more income.

6. What are all the conditions for sustainable life style?

    a. It is essential to achieve a more balanced and equitable distribution of land resources and income to meet everyone’s basic needs.
    b. The rich countries should lower down their consumption levels, while the minimum needs of the poor should be fulfilled by providing them resources.

7. Define a True Sustainable Development.

   True sustainable development aims at optimum use of natural resources with high degree of reusability, minimum wastage, and least generation of toxic by products and maximum productivity.

8. Draw the Dimensions of sustainable development.

9. Define Inter and Intra generational equity.

   Inter generational equity: It states that we should handover a safe, healthy and resourceful environment to our future generations.
   Intra generational equity: It states that the technological development of rich countries should support the economic growth of the poor countries and help in narrowing the wealth gap and lead to sustainability.

10. What are all the approaches for sustainable development?

    a. Developing appropriate technologies.
    b. Reduce, Reuse, Recycle (3R) approach.
    c. Providing environmental education and awareness.
    d. Consumption of Renewable Resources.
    e. Conservation of non renewable resources.
    f. Population Control.

11. What is Urbanization?

    Urbanization is a movement of human population from rural areas to urban areas for the want of better education, communication, health, employment, etc.,

12. List some energy demanding activities of urbanization.

    a. Residential and commercial lightings.
    b. Increased need for transportation and supporting roads.
    c. Large need of energy for new industries.
    d. Supports for modern life style.
    e. Enhanced control systems for pollution.

13. List some needs for water conservation.
    a. Water pollution decreases the availability of water.
    b. Better life style requires more fresh water.
    c. Increasing of Population.

d. Deforestation leads to inadequate rainfall our major source of fresh water.

14. What are all the strategies to conserve the water?

    a. Reducing evaporation losses.
    b. Reducing irrigation losses.
    c. Re-use of water.
    d. Preventing wastage of water.
    e. Decreasing run-off losses.
    f. Avoid discharge of sewage.

15. What is Rainwater Harvesting?

    Rainwater harvesting is a technique of capturing and storing of rainwater for further utilization. Roof top rainwater harvesting system is very effective way to store and increase the level of water table of ground water

16. Define Watershed.

    Watershed is defined as the land area from which water drains under the influence of gravity into a stream, lake, reservoir or other body of surface water.

17. What are all the factors affecting the water shed?

    a. The watersheds are found to be degraded due to uncontrolled, unplanned and unscientific land use activities.
    b. Overgrazing, deforestation, mining, construction activities also affect and degrade various watersheds.
    c. Droughty climates also affect the watershed.

PART – B

1. Explain in detail about Role of an individual in conservation of Natural Resources.
2. Explain in detail about Sustainable Development.
3. Explain in detail about Urbanization Problems.
4. Explain in detail about water conservation and rainwater harvesting.
5. Explain in detail about watershed management.