

Topic 7: Management of natural resources

GIST

- 1) **Natural resources:** it is stock of the nature such as air, water, soil, minerals, coal, petroleum, forest and wildlife that are useful to mankind in many ways.
- 2) **Pollution:** it is defined as the undesirable change in physical, chemical or biological characteristics of our soil, air or water, which harmfully affect human lives or the lives of other species.
- 3) **pH of water:** pH stands for 'potential of hydrogen'. The acidic and basic character of aqueous solutions can be described in terms of hydrogen ion and hydroxyl ion concentration a pH below 7 indicates an acid solution and above 7 indicates an alkaline solution.
- 4) **Three R's to save the Environment:** We can reduce pressure on the environment by applying the maxim to 'Reduce, Recycle and Reuse' in our lives.
- 5) **Sustainable Development:** It is the development which can be maintained for a long time without undue damage to the environment.
- 6) **Need to manage our Resources:** Our natural resources are limited. With the rapid increase in human population, due to improvement in health care, the demand for all resources is also increasing.
- 7) **Biodiversity:** It is the existence of a wide variety of species of plants, animals and microorganisms in a natural habitats with in a particular environment or of genetic variation with a species.
- 8) **Wildlife:** It means all those naturally occurring animals, plants and their species which are not cultivated, domesticated and tamed.
- 9) **Water harvesting:** It means capturing rainwater where it falls or capturing the run off in a local area and taking measures to keep the water clean by not allowing polluting activities to take place.
- 10) **Fossil Fuels:** These fuels are obtained from the remains of plants and animals, which got buried beneath the earth millions of years ago, changed into coal, petroleum and natural gas due to excessive heat and high pressure inside the earth.
- 11) **Coal:** It contains chiefly carbon and its compounds mainly nitrogen, oxygen, sulphur and hydrogen. It also contains inorganic matter.

12) Non-renewable Energy Sources: These are energy sources which cannot be replaced easily when they get exhausted and are also called conventional sources of energy. E.g.: Fossil fuels.

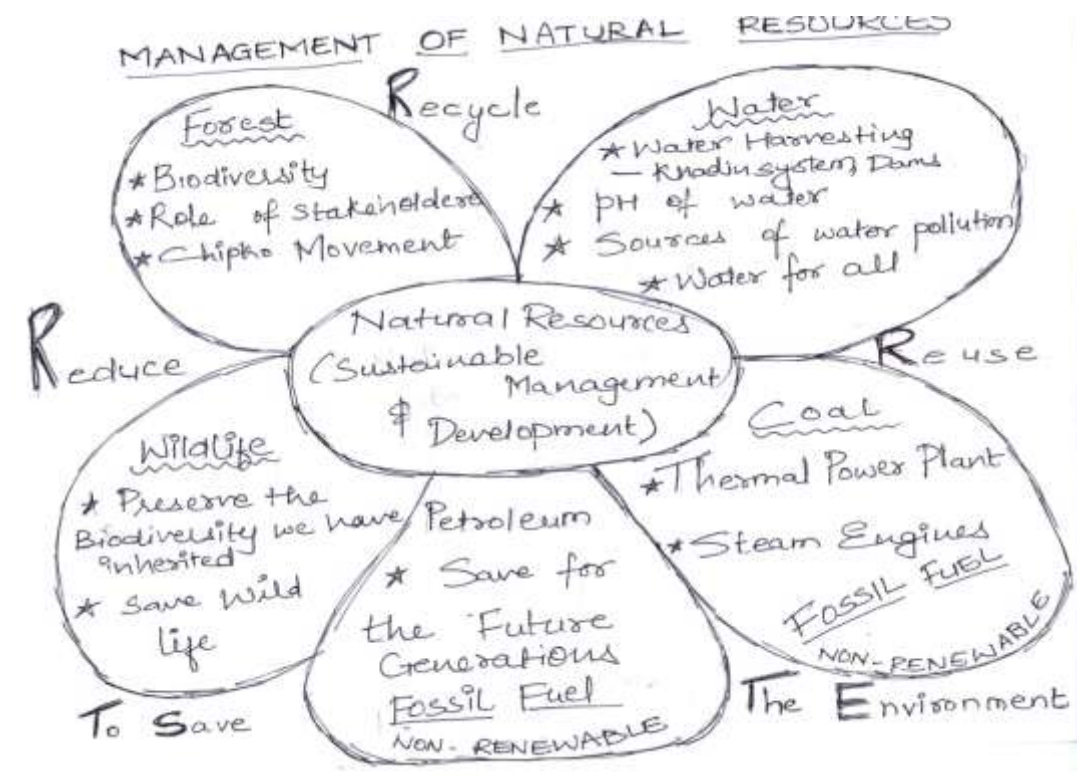
13) Uses of Fossil Fuels:

Coal: Thermal power plants and steam engines

Petroleum: Petroleum products like petrol and diesel are used as means of transport.

14) Management of Fossil fuels: The natural gas is a good alternative to fossil fuels like coal and petroleum. The use of alternative source of non- conventional source of energy such as solar energy, wind energy, biomass energy etc. Should be promoted to save the reserves of fossil fuels .biogas can also be used for various purposes.

MIND MAP



FORMATIVE ASSESSMENT –III

(paper pen test)

- Q 1.i) Which one of the following started chipko movement 1
a.A.K.Banerjee b. Amrita devi bisnoi c.Sundar Lal Bahuguna d. Medha patkart.
- ii. From the list given pick the item that is not a natural resource?
a.soil b. water c. air d. electricity
- iii. The pH range most conducive for life of fresh water plants and animals is 1
a. 6.5-7.5 b.2.0-3.5 c.3.5-5.0 d.9.0-10.5
- Q.2 What are renewable resources? How are they different from non renewable resources 2
- Q3 What would be the advantages of exploring resources and long term aim 2
- Q4. Why should there be equitable distribution of resources 2
- Q5 why are coal and petroleum known as fossil fuels?why do we need to conserve them? 3
- Q 6. Name the three “R” to save the environment ?explain how each of them is beneficial for mankind? 3
- Q7. Who are the stakeholders in forest? Why do we think so?

HOTS

1. What do you mean by Bio-Reserves? What are their objectives?
- 2.Explain the main points of difference between Agro Forestry and Urban Forestry Programme.
- 3.Beutiful Landscapes are of great value to Human Beings. Explain.

FORMATIVE ASSESSMENT –IV

QUIZ

1. Chipko Andolan originated in
 - a. Kerala
 - b. Rajasthan
 - c. Uttarakhand
 - d. Karnataka
2. Kulhs are irrigation Canals of
 - a. Rajasthan
 - b. Karnataka
 - c. Himachal Pradesh
 - d. Assam
3. Which of the following is green house gas?
 - a. Sulphurdioxide
 - b. Carbon monoxide
 - c. Carbondioxide
 - d. Nitrogen dioxide
4. Which of the following bacteria is found in Garga water ?
 - a. Coliform bacteria
 - b. Streptococcus bacteria
 - c. Staphylococcus bacteria
 - d. Diplococcus bacteria
5. Stake holders of forest resources in India are
 - a. Local people and industries
 - b. NGO
 - c. Forest enthusiasts
 - d. All of these

6. Arabari forest of Bengal is dominated by
 - a. Teak
 - b. Sal
 - c. Bamboo
 - d. Mangrove
7. Which of the following are to be managed for sustainable developments?
 - a. Industries
 - b. Forest
 - c. Crops
 - d. Resources
8. Red data book provides a list of :
 - a. Protect animals
 - b. Rear animals for milk
 - c. Endangered animal
 - d. Both a & b
9. Sardar sarovar dam is situated on river
 - a. Ganga
 - b. Narmada
 - c. Yamuna
 - d. Godavari
10. Pynes System of irrigation is common in:
 - a. Bihar
 - b. Madhya Pradesh
 - c. Rajasthan
 - d. Himachal Pradesh

Debate:

Topic “Money spent on protection of wild life should actually be spent for the welfare of poor people”

Seminar :

Reading papers by the students on the following topics:

- i. River water pollution –source and solution
- ii. Sustainable development

Symposium

- i. Global warming and melting Himalaya –a controversy”
- ii. Save the tiger.

Home Assignment

1. Making a model to show Rainwater Harvesting.
2. Carry out a survey in your locality where Rainwater is being harvested.
3. Record the mode of transport used by your classmates.
4. Find out the amount of diesel/petrol used by families of your classmates.
5. Checking the PH of water from various sources.

Topic 8 OUR ENVIRONMENT

GIST

1. **ECOLOGY** – The study of the interaction of living organisms with each other and their surrounding is called ecology.
2. **ENVIRONMENT** –Everything that surrounds organisms and influences its life.
 - a) Biotic components of environment – The living organisms e.g. Plants and animals.
 - b) Abiotic components of environment –the nonliving components like air, light, etc.
3. **ECOSYSTEM** – All interacting organism in area =together with the nonliving constituents of environment. (Functional unit of an environment)