

Management of Natural Resources

Assess Yourself

Q.1. What is 'Narmada Bachao Andolan'?

Answer: 'Narmada Bachao Andolan' was a movement against raising the height of Sardar Sarovar Dam on the river Narmada. This movement was led because construction of large dams led to many social, economic and environmental problems like displacement of people without proper compensation or less benefits to poor people from these dams than what was promised as well as deforestation.

Q.2. What is 'Amrita Devi Bishnoi National Award'?

Answer: 'Amrita Devi Bishnoi National Award' was instituted by government for wildlife conservation in memory of Amrita Devi Bishnoi. For Bishnoi community conservation of forest and wildlife was very important. Amrita Devi sacrificed her life for protection of Khejri trees in Khejrali village which is near Jodhpur in Rajasthan along with 363 other people in 1731.

Q.3. Give your view point about the conservation of natural resources.

Answer: we should conserve forest, wildlife and other natural resources like water, fossil fuels because they are a tool for development and survival of human beings and reduction of environmental or global problems.

These resources are not unlimited and human population is increasing at tremendous rate so we need a sustainable environment in which we can meet current basic human needs along with preserving the resources for future generations, therefore we need to conserve the natural resources.

Q.4. Why is the management of forest and wildlife resources considered as a challenging task?

Answer: Management of forest and wildlife resources is considered as a challenging task because there are four main stakeholders (the person with an interest or concern in something):

- Local people living there who depends on forest for their life.
- Forest department of government who owns the land.
- Industrialists who use various forest products.
- Forest and wildlife activists who wants to save forests.

Also there is not equitable distribution of natural resources. Rich industrialists lead to major deforestation and local people use the forest produce in sustainable manner.

Q.5. How are damages caused to forest?

Answer: There are many ways in which damage is caused to forest. Some of them are listed below:

- Forest trees are cut down to obtain wood for use in buildings, furniture, paper, and sports goods.
- Forest department allows cutting down because it is good source of revenue for them
- Developmental projects like building roads through forest area and construction of dams.
- Incoming of tourists to forest, building rest houses and dumping of waste materials in the forest.

Q.6. How local people can be used for successful forest management?

Answer: Local people's participation in the management of forests can help in increasing forest produce and conservation of forest.

An example of this is of 1972, when West Bengal Forest Department involved local people to improve the degraded Sal forests. A forest officer A.K Banerjee along with villagers protected around 1200 hectares of Sal forest in Midnapore district and in return villagers were given employment. They were also allowed to collect firewood and fodder from forest at very less amount.

So local people can lead to efficient management of forest as they use forest produce in sustainable manner.

Q.7. What is watershed management?

Answer: watershed management means scientific soil and water conservation in order to increase biomass production. In this management we develop such resources of land and water which will not cause ecological imbalance. Various organizations have been working on alternative to dams like digging small pits and lake, sand and limestone reservoirs, rooftop water collecting units which saves rain water.

These all methods have recharged the depleting ground water levels. Also watershed management leads to reduction of droughts and floods.

Q.8. What are the different techniques of water harvesting?

Answer: Water harvesting is an old practice. Water harvesting techniques depends on the location where it is to be used. Some of them are listed below:

- Khadins, Tanks and Nadis in Rajasthan.
- Bhandaras and Tals in Maharashtra.
- Ahars and Pynes in Bihar.
- Bhundhis in MP and UP.
- Kulhs in Himachal Pradesh.
- Ponds in Jammu region.
- Eris (tanks) in Tamil Nadu.

- Surangams in Kerala.
- Kattas in Karnataka.

Purpose of rainwater harvesting is not only to hold rainwater but also to recharge groundwater.

Q.9. 'Economic growth and ecological conservation should go hand in hand'? Explain why.

Answer: Economic growth is very important for each country but ecological conservation is equally important as the exploitation of natural resources with short term aim would be beneficial for present but no resources would be left for future generations.

Without resources there will be no point of economic growth as most of the economy will be invested in taking resources from other countries at a high cost or renewing the resource which will also take a long time. There is also serious damage to environment like global warming without ecological conservation.

Q.10. What are fossil fuels? How are coal and petroleum formed? Why fossil fuels should be used judiciously?

Answer: Fossil fuels are the natural resources which are important sources of energy. For example: Coal and Petroleum. Coal is used as fuel in homes and industry. Petroleum products such as petrol and diesel are used in transports like scooters, cars, buses etc.

Coal and petroleum were formed from degradation of biomass of plants and animals respectively, which were buried deep under the Earth millions of years ago. We obtain coal from 'coalmines' into the Earth and petroleum is obtained from 'oilwells' deep in the Earth.

Fossil fuels should be used judiciously because they are limited in the Earth out of which petroleum is expected to last for about 40 years and coal for 200 years. Once exhausted, they will be not available to us till a very long period as they are formed at extremely slower rate. Secondly, the products of combustion of fossil fuels pollute the environment to large extent and lead to global warming.

Q.11. Your father has a small four seater car which is good enough for your family of four. However, both your neighbours have big SUV cars. Your mother often feels bad as her children travel in a small car as your neighbours children travel in a big SUV. She has therefore, asked your father to buy an SUV for your family also.

(a) Do you agree with your mother? Give two reasons to support your answer.

(b) Give an example by which you can contribute in reduction of air pollution.

(c) What should government do to reduce air pollution?

Answer: (a) No, i don't agree with her because in my opinion the small car is also serving the same purpose with less cost as large size of SUVs require it to burn more gas i.e. an increase in cost when fueling.

Also, use of more gas lead to negative environmental effect by increasing air pollution and depletion of natural resources like fossil fuels.

(b) There are many small things which can be done as an individual to reduce air pollution. An example of this is going to nearby place by bicycle instead of going by scooter or car and creating awareness about this among our friends, family and neighbours.

(c) Government should ban the non-eco-friendly vehicles and introduce affordable eco friendly vehicles in country. Selling of crackers should not be allowed. Burning of forests and smoking of ciggerates should also be restricted and whoever does so, must be imposed with heavy fine.