

## **ENVIRONMENT AWARENESS & CONSERVATION**

### **Q 1. Define 'Natural Resources' and name the types of natural resources.**

Ans. Natural resources is any useful product which is produced by nature and is essential for our survival. Natural resources can be classified in different ways as per their nature or availability or types. It is classified as either Renewable or Non-Renewable.

### **Q 2. Write down the Role of NCC in Conservation of Natural Resources.**

Ans. Every Cadet can fulfill his obligation towards environment individually or collectively by following means:-

- (a) Avoiding cutting of trees and by planting more trees.
- (b) Not polluting water sources like river, ponds, sea.
- (c) Avoiding use of plastic
- (d) Avoiding noise pollution
- (e) Recycling natural resources to ensure their efficient sustainable use.
- (f) Using renewable sources of energy like solar and wind power.
- (g) Saving energy in small matters like switching off fans, lights and by walking / cycling short distance.

### **Q 3. Brief 'Ozone Depletion' and 'Global Warming'.**

Ans. **Ozone Depletion**: This is a process by which the total volume of ozone in the Earth's atmosphere decreases. The major reason for this ozone layer depletion is the production of man-made refrigerants (CFC, Freon, Halons). Since the ozone layer prevents most harmful UVB wavelengths (230 – 315 nm) of ultraviolet light (UV light) from passing through the Earth's atmosphere, depletion of the ozone layer has serious damaging effects.

**Global Warming**: Global warming is a phenomenon associated with the increase of earth's temperature. One of the major causes of global warming has been excessive production of Greenhouse gases. A greenhouse gas is a gas that absorbs and emits radiation within the thermal infrared range. The primary greenhouse gases in the Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide and ozone. Greenhouse gases have a great affect on the earth's temperature.

### **Q 4. Explain 'Rain Water Harvesting'.**

Ans. Rainwater harvesting means capturing the runoff of the rainwater in our own house, village, town or city. It basically means accumulation and storage of rainwater for reuse, before it reaches the aquifer. Utilisation includes water for garden, livestock, irrigation, etc. In many places, the water collected is just redirected to a deep pit with percolation. The harvested water can be used for drinking water also, if the storage is a tank that can be accessed and cleaned when needed.

### **Q 5. Name the types of Rainwater Harvesting systems.**

Ans. There are a number of ways to harvest rainwater, ranging from very simple to the complex industrial systems.

- (a) Ground Catchment Systems (b) Roof Catchment Systems (c) Subsurface Dyke

**Q 6. How as an individual you can contribute to the Waste management.**

- Ans. (a) Reduce use of plastic bags and replace with paper or jute/cloth bags.  
 (b) Segregation of household waste into bio-degradable and non-biodegradable.  
 (c) Recyclable waste such as paper, glass, cloth etc could be segregated and disposed off accordingly.  
 (d) Keep the surroundings of your house and around the house clean. Do not dump waste just outside the house on the road.  
 (e) Colonies could start vermin-composting and natural composting.

**Q 7. Waste material are classified into different types, name them?**

Ans. Solid Waste, Liquid Waste, Radioactive Waste, Municipal Solid Waste, Hospital or Bio-Medical Waste, E-waste, Hazardous Waste.

**Q 8. Name the different types of Pollution and explain any one of them.**

Ans. Soil pollution, Water pollution, Air pollution, Sound pollution.

**Soil Pollution.** Today's industrialised society produces a huge amount of garbage, the disposal of such wastes is a major problem, especially in the urban centers. Non-biodegradable wastes such as polythene bags, which cannot be decomposed by natural agents like bacteria have become a menace to the environment besides being health hazards. Use of chemical fertilizers and pesticides containing harmful substances contaminates the soil. Soil may become deficient in nutrients due to excessive cultivation or if the same crop is grown repeatedly on the same plot.

**Water Pollution.** Waste-water from our homes, hospitals and factories is usually discharged in to the water bodies. Such water contains excreta, disease-causing micro-organisms and harmful chemicals. It makes water unfit for drinking and may even kill aquatic plants and animals. Harmful substances seeping through earth rainwater contaminate groundwater. Plant nutrients derived from fertilizers and organic wastes like dead bodies thrown into water sometimes cause excessive growth of weeds. Many aquatic organisms die as a result of oil spills from tankers. Leaking pipelines also pollute water organisms. Many species of birds and fish die from contact with oil as it makes feathers and gills inactive.

**Air Pollution.** Air pollution is caused mainly by harmful substances emitted into the atmosphere by industries and automobiles. It causes respiratory diseases and affects the skin and eyes. Some of the gases emitted by industries dissolve in rainwater to produce acid rain, which can damage vegetation. Atmospheric ozone which protects us from harmful ultra-violet rays is depleted due to release of certain carbon compounds called chlorofluorocarbons (CFCs) into the atmosphere. This also increases the risk of skin cancer and eye damage in humans.

**Sound Pollution.** Sound produced from motor vehicles, trains, aero planes, factories, sound during religious and political public meetings, noise produced by the masses and other living creatures also plays an important role in producing sound pollution. It also affects the health of human beings. Loud sound affects the human heart, create auditory problems and causes mental stress.

**Q 9. Write on the Role of the NCC cadets in curbing the menace of Pollution.**

Ans. NCC being one of the largest youth organisations has to play a significant role towards the pollution control. A youth can guide and contribute by educating others about the dangers of pollution. We have to respect our environment and natural resources and not pollute the same. Rivers and water bodies must be kept clean as water is an essential resource and it cannot be wasted. In fact every drop has to be saved. Cadets can visit villages and guide the farmers regarding the use of natural manure instead of chemical fertilizer produced after generating industrial waste.

**Q 10. Write 05 points on the measures to Control Pollution.**

Ans. Measures to control pollution include the following:-

- (a) To develop consciousness among common people to control all pollution. Plant more and more trees.
- (b) The use of loud horns or mindless blowing of horns by motor vehicles should be banned.
- (c) The water bodies should not be used as waste reservoirs.
- (d) Various sources of drinking water, and water resources should be well protected so that dirty water does not enter these water bodies.
- (e) Environmental education should be made compulsory in all educational institutions.
- (f) Excessive use of pesticides and insecticides should be avoided.
- (g) In all towns and cities there should be proper arrangement of dustbins to collect garbage being produced in the houses.
- (h) In the factories strict precaution should be instituted to avoid pollution of various types.
- (j) Running of old and pollution emitting vehicle should be banned.
- (k) The pollution control Administrative Authorities must have independent powers to implement their decisions.