

## **UNIT:22 ENVIRONMENTAL MANAGEMENT**

### **BOOK BACK QUESTION ANSWERS**

#### **IX-HIGHER ORDER THINKING SKILLS (HOTS)**

1. **Although coal and petroleum are produced by degradation of biomass ,yet we need to conserve them. Why?**

- Coal and petroleum are natural resources. They are called fossil fuels as they are formed from the degradation of biomass buried deep under the earth millions of years ago.
- The coal and petroleum reserves can get exhausted if we continue using them at a rapid rate. The formation of these fossil fuels is a very slow process and takes very long period of time for renewal.
- It is necessary to conserve or save coal and petroleum resources for the future use, which can be done by reducing their consumption.

2. **What are the objectives for replacing non-conventional energy resource from conventional energy resources?**

- Conventional sources of energy includes fossil fuels and nuclear power. These sources of energy are expensive and are becoming limited.
- The non –conventional energy resources such as solar power, wind energy, hydro power etc seems to be promising.
- Since they are available abundantly and cheap which can meet the demand of our nation.
- Hence steps are taken to replace conventional sources with non-conventional sources of energy.

3. **Why is the Government imposing ban on the use of polythene bags and plastics? Suggest alternatives. How is this ban likely to improve the environment?**

- Polythene bags and plastics are non biodegradable materials.
- If they are used, they accumulated in the soil, water bodies etc.
- In the soil these act and alter the nature of the soil.
- It prevents aeration and affects microbes.
- Excessive accumulation of plastics can render the soil barren.
- In water bodies they cover the water surface and prevent oxygen from diffusing into the water thereby affecting aquatic flora and fauna.
- Plastic cover also finds their way into the stomach of animals during feeding and may even prove to be fatal.
- Burning of plastics produces dioxin which cause developmental and reproductive problem damage to the immune system.

#### **Alternative methods to avoid plastics**

- Use bags made of eco-friendly materials

- Use dining plates and cups made by Biodegradable material instead of plastic plates and cups
- Use vessels and containers made of steel
- Carrying our own cloth bags for shopping.
- The ban on plastics by the government will improve the environment because,
- Plastic waste will be reduced and slowly disappear.
- It will help the water bodies and soil to promote microbial growth.
- It will lead to decreasing challenges faced by government in disposal of solid wastes.
- Human beings will not be exposed to health hazards caused by the use of plastics specially dining plates and cups

### **X-VALUE BASED QUESTIONS**

#### **1. Why is it not possible to use solar cells to meet our solar energy needs?**

**State three reason to support to your answer**

- Solar cells are expensive.
- If energy needs are high huge solar panels need to be installed which is not economically suited for all.
- Sunlight must be available throughout the year.
- The efficiency of energy conversion is low as compared to other means of generating electricity.

#### **2. How would you dispose the following wastes?**

**a. Domestic wastes like vegetable peels.**

**b. Industrial wastes like metallic cans**

**Can the disposal protect the environment ?How?**

- It can be disposed by composting it in the garden. This will help to decompose the waste and returns the nutrients to the soil there by adding fertility to the soil and this will also help to manage the waste.
- Metallic cans must be given to recycling units. The cans will be melted and can be reused to make other objects.

#### **3. List any three activities based on 3R approach to conserve natural resources.**

- **REDUCE** the use of natural resources.  
Example-coal.
- **REUSE** the waste whenever possible.  
Example-Water from kitchen can be used for growing plants.
- **RECYCLE** the materials whenever possible.  
Examples- a)Use of treated sewage water for gardening,  
b) Bio waste to be made into compost.