14. **Changes in Our Environment**

1.What do you understand by greenhouse effect? List five greenhouse gases.

Ans The Earth’s surface traps the Sun’s energy and becomes warm. When the surface cools, it releases the heat back into the air. The atmosphere does not allow this heat to escape out entirely into the space. Some of the gases in air,such as carbon dioxide and water vapour, trap some of this heat. This natural process is called the greenhouse effect.

Carbon dioxide, water vapour, methane, ozone and nitrous oxide are examples of greenhouse gases.

2. What are the sources of nitrous oxide gas in the environment?

Ans Nitrous oxide is released into the atmosphere when fossil fuels and plant and animal matter are burnt. Use of fertilizers in agricultural processes also produces this gas.

3. What is global warming? How is it harmful for environment?

Ans The greenhouse effect causes warming of the Earth’s atmosphere. Due to excess of greenhouse gases, the atmosphere traps and sends back more heat towards the Earth. This may result in a rise in the temperature on the Earth. This is called global warming.

The effects of global warming are already visible. Ice caps are melting and water level in the sea is rising. This may lead to flooding of low-lying areas near the sea in the future. The climate patterns may also change for the worse.

4. State five steps that you will follow to reduce pollution in your environment?

Ans We can reduce pollution in the following ways:

i.Using more of solar and wind energy will make us less dependent on fossil fuels. This will reduce the release of carbon dioxide into the atmosphere.

ii.Using public transport such as buses and trains instead of cars will also help in reducing the use of fuels.

iii.We should use LED lights instead of mercury lights in our homes. Mercury lights cause pollution when discarded. LED lights also consume less electricity.

iv.Factories and vehicles should install machines to convert polluting gases into harmless ones before releasing them into the atmosphere.

v.Waste material from houses, offices and factories should be treated properly to convert them into non-polluting substances before releasing them into rivers or other water bodies.

5. Name the three R’s of environmental protection. Give one example of each of them.

Ans The three R’s of environmental protection are Reduce, Reuse and Recycle.

Reduce – We should use a bucket and mug to take a bath instead of using the shower.

Reuse – We can reuse plastic bottles and cans for storing things.

Recycle – Just as we sell old newspapers for recycling, we should also sell other unused things such as metal scrap in our homes that are recyclable.