

Q.1 Select the correct answer from the choice A, B, C given in each case.

- The major pollutant released during burning of fossil fuels.
A: Carbon monoxide B: Sulphur dioxide C: Hydrogen sulphide
- The green house gas which on combustion produces another green house gas.
A: Nitrous oxide B: Ozone C: Methane
- The gas which in presence of U.V. light gives two atoms of the same gas.
A: Oxygen B: Ozone C: Carbon dioxide
- A chemical responsible for ozone depletion.
A: Methyl acetylene B: Methyl chloride C: Methanol
- A renewable source of energy which causes minimum or no pollution.
A: Fossil fuel B: L.P.G. C: Hydro power

Q2. Give balanced equations for the following conversions [one or two steps].

- Sulphur trioxide to sulphuric acid – a constituent of acid rain.
- Nitrogen to nitrogen dioxide – in an internal combustion engine.
- Methane to carbon dioxide – a green house gas.
- A molecule of ozone to two molecules of oxygen gas.
- Oxygen to ozone gas by photolysis

Q3. Name or state the following:

- An atmospheric pollutant produced during lightening discharge.
- A form of wet deposition of acid rain other than rain water.
- An atmospheric pollutant responsible for both global warming and ozone depletion.
- A green house gas which contains carbon and hydrogen only.
- The atom which reacts with oxygen to form ozone.

Q4. Give Reasons

- Destruction of ozone layer is harmful for both humans and plants.
- The formation of ozone involves a chemical reaction called photolysis.
- In absence of green house gases the surface temperature of the earth is maintained.
- Natural rain water does not have a pH of 7 [i.e. neutral]

Q5. Answer in detail

- Name the chemicals responsible for destruction of the ozone layer. State the main chemical from these chemicals, which is responsible for more than 80% ozone depletion. State the man-made applications which make use of that chemical.
- State the role of chlorofluorocarbons in ozone destruction or depletion [no equations required].