**Climate Change**

1. What is Climate?

* Climate is generally prevailing weather conditions of an area such as Winds, Sunshine, Precipitation and Humidity.

1. What is then Climate Change?

* Climate change is the long-term alteration of temperature and typical weather patterns in a place.

Causes Of Climate Change

1. **Greenhouse gases**

The main driver of climate change is the greenhouse effect. Some gases in the Earth's atmosphere act a bit like the glass in a greenhouse, trapping the sun's heat and stopping it from leaking back into space and causing global warming.

Many of these greenhouse gases occur naturally, but human activity is increasing the concentrations of some of them in the atmosphere, in particular:

* carbon dioxide (CO2)
* methane
* nitrous oxide
* fluorinated gases

CO2 produced by human activities is the largest contributor to global warming. By 2020, its concentration in the atmosphere had risen to 48% above its pre-industrial level (before 1750).

Other greenhouse gases are emitted by human activity in smaller quantities. Methane is a more powerful greenhouse gas than CO2, but has a shorter atmospheric lifetime. Nitrous oxide, like CO2, is a long-lived greenhouse gas that accumulates in the atmosphere over decades to centuries.

“Also, in case you have noticed, the earth just got a little hotter lately,

**Causes for rising emissions**

* Burning coal, oil and gas produces carbon dioxide and nitrous oxide.
* **Deforestation:** Trees help to regulate the climate by absorbing CO2 from the atmosphere. When they are cut down, that beneficial effect is lost and the carbon stored in the trees is released into the atmosphere, adding to the greenhouse effect.
* **Increasing livestock farming.** Cows and sheep produce large amounts of methane when they digest their food.
* **Fertilisers containing nitrogen** produce nitrous oxide emissions.
* **Fluorinated gases** are emitted from equipment and products that use these gases. Such emissions have a very strong warming effect, up to 23 000 times greater than CO2.