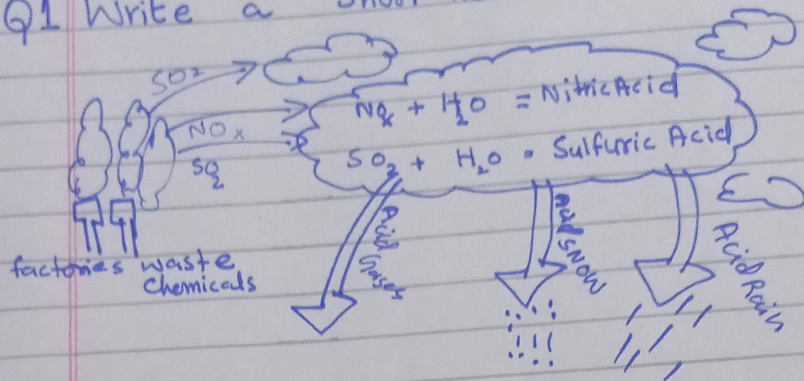


GSA (for Evaluation)

Q1 Write a Short note on Acid Rain.



Definition

Acid rain is rain or any other form of precipitation that is usually acidic, meaning that it has elevated levels of hydrogen ions, caused by a chemical reaction that begins with compounds like sulfur dioxide and nitrogen oxides are released into air.

Causes of Acid Rain

The causes of acid rain are Sulphur and Nitrogen Particles which get mixed with the wet components of rain.

Sulphur and Nitrogen Particles which get mixed with water are found in two ways

Acid rain caused
Man made ↙ ↘ Natural

According to the Royal Society of Chemistry

(The word acid rain was invented by Scottish Chemist Robert Angus Smith in 1852, Smith decided on the word while studying rainwater chemistry in industrial towns in England.)

② Industrial Chemical Smoke

Power plants release the majority of sulfur dioxide and much of the nitrogen oxides when they burn fossil fuels, such as, coal to produce electricity, in addition. The Exhaust from cars, trucks etc releases nitrogen oxide and sulfur dioxide into the air.

③ ~~Effects~~ Effects of Acid Rain

- Acid Rain is harmful for agriculture, plants and animals as it washes away all nutrients which are required

④ R

For the growth and survival of plants. Acid rain affects agriculture by it alters the composition of the soil.

- It causes respiratory issues in animals and humans.
- It damages the building and monuments made up of stones and metals.

Real life Examples

Taj Mahal, one of the 7 wonders of the world, is largely affected by acid rain. The city of Agra has many industries which emit the oxides of Sulphur and nitrogen in the atmosphere, $\text{CaCO}_3(\text{s}) + \text{H}_2\text{SO}_4(\text{l}) \rightarrow \text{CaSO}_4(\text{s}) + \text{H}_2\text{O}(\text{l}) + \text{CO}_2(\text{g})$
The formation of calcium Sulphate results in the corrosion of this beautiful monument.

④ Prevention of Acid Rain.

- The only precaution that we can take

