

Q: What is atmospheric pollution? What causes the atmospheric pollution- (5-Marks)

Atmospheric Pollution

Atmospheric pollution is one of the grave environmental problem which the world is facing in the 21st century. According to WHO (World Health Organization): The situation in which the atmosphere contains pollutants such as Carbon-dioxide (CO_2), Nitrogen oxide (NO_x), Sulfur dioxide (SO_2), Methane (CH_4), Nitrous oxide (N_2O), chloroflouro carbons (CFCs), Carbon monoxide (CO), Sulfuric acid (H_2SO_4), nitric acid (HNO_3) etc. in such concentrations which is harmful to the human health, plants, animals, aquatic life, microorganisms and environment is called atmospheric pollution.

Causes of Atmospheric Pollution

There are various causes of atmospheric pollution. Following are the severe causes which gives birth to atmospheric pollution-

1. Fossil Fuels

The overwhelming dependency of human beings on non-renewable fossil fuels, such as, Coal, oil, diesel and natural gas since the industrial revolution has disturbed the natural setting of environment badly. It increases

The levels of Carbon dioxide (CO₂), Carbon monoxide (CO) and Sulphur dioxide (SO₂) in the atmosphere. According to "Intergovernmental Panel on Climate Change" (IPCC), 96% of global atmospheric pollution is caused by energy, agriculture, industrial and transport sector collectively. The sector wise contribution is shown below in the table -

Sectors	Percentage (%)
Energy	35%
Agriculture	25%
Industrial	21%
Transport	15%

Total = 96%

11 - Population Explosion

The population of the world is consistently increasing. In spite of facing disasters, wars ^{and} pandemic, there was not seen any dip in the graph of population, it has always been pushed up. When the population is increased, it rises the consumption. In order to fulfill demands of large number of people production is increased in the industries, increase urbanization, deforestation, solid waste generation, energy demand and transport demand. In this process, pollutants are added into environment.

As per United States Census Bureau :

Population of world in 1960 : 3 billion

- In 2000 : 6 billion
- In Nov, 25th, 2022 : 8 billion
- Current Population is 8.1 billion

iii- Rapid Urbanization

Urbanization is increasing intensity of people in the cities, as a result of migration from rural areas to urban areas, in the search of better opportunities and to enjoy basic needs of life. According to United Nations (UN) report of 2015: In 2014, the 54% population of the world was urbanized. Currently, this figure reaches approximately to 60%. As a result of urbanization, the villages are speedily turned into towns, towns into cities and cities into large metropolises. In order to fulfill the demands of dense population, heavy construction is increased. Production in industries, number of vehicles and solid waste generation is increased, which adds the pollutants into the atmosphere and disturbs the natural composition of the environment.