

General Science CSS - 2025

Q4 (d)

What does air pollution mean? State ten serious effects of air pollution on the environment and briefly explain how they can be removed?

The addition of toxic chemicals and gases in the atmosphere that corrupts and pollute the quality of air is known as air pollution.

Air pollution is a serious threat to human life, wildlife and environment. The ten serious effects of air pollution on environment are as follow:

1. Climate change

Air pollution is causing a rapid change in global climate patterns. Like Temperature, glacier melting, rainfall patterns.

3. Acid Rain

Chemicals like SO_x and NO_x cause acid rain which damages buildings, pollutes water and a threat to marine life.

2. Global Warming

One of the major concerns of 21st century, global warming is contributing to rise in temperature globally about 1.5°C annually which is a concern for global powers whilst, according to recent data Pakistan is ranked the 2nd country to be drastically affected by global warming.

4. Effect on Ecosystem

Air pollution also drastically affects the wildlife. Some migrate to other areas but fail to survive due to non-adaptation to the new environment.

5. Glacier melting

As air pollution is causing an increase in temperature, resulting in the melting of glaciers rapidly.

6. Ozone depletion

The addition of CFCs gas in the air is corroding the ozone layer, which is a shield to protect planet earth from harmful UV rays.

7. Bad Air Quality

Due to excessive toxins in the air, its quality is severely corrupted, which is causing fog and smog and reduced visibility.

8. Eutrophication

Excess nitrogen can deplete the soil and aquatic ecosystem, thus causing eutrophication.

9. Damage to Plants

Reduced photosynthesis, stunted growth of crops and plants are all the results of air pollution.

10. Water contamination

Acid rain and other toxins can contaminate water, due to which aquatic life is at the verge of extinction.

The impacts of air pollution cannot be removed but they can^{be} minimized to some extent.

1. To use public transport instead of private transport.
2. Carbon emissions must be controlled
3. Chlorine should be added to water bodies
4. Disposing off toxins and chemicals carefully and avoid burning
5. Conserve energy: minimize the use of high power light bulbs.