**Acid rain**

Acid rain is a fascinating environmental issue that affects many parts of the world. It occurs when air pollution from factories, vehicles, and other sources get mixed with moisture in the atmosphere, forming acidic compounds. These fall to the ground as rain, which can be harmful to both the natural world and human-made structures.

Understanding the causes of acid rain is essential. When fossil fuels are burned, they release sulphur dioxide (SO2) and nitrogen oxides (NOx) into the air. These pollutants drift through the atmosphere until they encounter water vapour. The chemical reaction that follows creates sulfuric and nitric acid, which then falls as acid rain.

The effects of acid rain are widespread. It significantly impacts bodies of water like lakes and rivers, making them more acidic. This change in pH can harm aquatic life, sometimes leading to the extinction of certain species. Forests are also affected as acid rain can damage leaves and make trees more vulnerable to disease and harsh weather conditions. Moreover, it can leach the soil of essential nutrients, further weakening plant life.

Acid rain doesn't just harm the natural environment. It also poses a risk to buildings and monuments, especially those made from limestone and marble. The acid can wear away these materials, causing significant damage over time. This is particularly concerning when it comes to historic structures, which can lose their details and even crumble after prolonged exposure.

Efforts to combat acid rain have seen some success. International agreements and local regulations have helped reduce emissions of the key pollutants. By using cleaner energy sources and implementing better technologies, we can minimise the production of sulphur dioxide and nitrogen oxides. However, continuous commitment and innovation are necessary to protect the environment from further damage.

In essence, acid rain is a complex issue that requires global attention. Understanding its causes and effects is crucial for mitigating its impact and preserving the world around us.

***Choose the right variant***

1. What is the primary source of the pollutants that contribute to acid rain?

A. Deforestation

B. Volcanic eruptions

C. Burning of fossil fuels

D. Chemical reactions in the atmosphere

2. Which of the following is an impact of acid rain on the natural environment?

A. Damage to human-made structures

B. Improvement in air quality

C. Increased growth of aquatic life

D. Weakening of plant life

3. Why is acid rain particularly problematic for historic structures?

A. It prevents preservation efforts.

B. It makes the structures more vulnerable to vandalism.

C. It can erode the materials over time.

D. It increases the risk of natural disasters.

4. What is the main purpose of international agreements and local regulations in addressing acid rain?

A. To promote the use of fossil fuels

B. To increase the production of sulphur dioxide and nitrogen oxides

C. To reduce emissions of key pollutants

D. To encourage deforestation

5. Which of the following is NOT mentioned as a way to minimise the production of sulphur dioxide and nitrogen oxides?

A. Implementing technological advancements

B. Promoting the use of cleaner energy sources

C. Increasing commitment and innovation

D. Planting more trees

6. What does the passage suggest about the complexity of the acid rain issue?

A. It is a simple problem with straightforward solutions.

B. It only affects a limited geographical area.

C. It requires continuous global attention and efforts.

D. It is a problem that has been fully resolved.

7. What is the overall focus of the passage?

A. Explaining the causes of acid rain

B. Describing the effects of acid rain

C. Discussing ways to combat acid rain

D. Providing a comprehensive overview of the acid rain issue

***Identify if the statement is true or false. Correct false statements***

Statements:

1. Acid rain is caused by the mixing of air pollution with moisture in the atmosphere.

2. The burning of fossil fuels releases only nitrogen oxides into the air.

3. Acid rain can harm aquatic life by making water bodies more acidic.

4. Buildings made from wood are particularly affected by acid rain.

5. Efforts to reduce acid rain have been somewhat effective due to international agreements.

6. Acid rain has no impact on human-made structures.

7. Continuous innovation is necessary to protect the environment from acid rain.

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