Q1: What is climate change?

A: Climate change refers to significant changes in global temperatures and weather patterns over time. While climate change is a natural phenomenon, scientific evidence shows that human activities, particularly the burning of fossil fuels and deforestation, have accelerated the process.

Q2: What are the main causes of air pollution?

A: The primary causes of air pollution include the burning of fossil fuels (coal, oil, natural gas), industrial emissions, vehicle exhaust, agricultural activities, and the use of household chemicals. These activities release harmful pollutants, including carbon monoxide, sulphur dioxide, nitrogen oxides, and particulate matter, into the atmosphere.

Q3: How does deforestation impact the environment?

A: Deforestation leads to the loss of trees and forests, which play a crucial role in absorbing carbon dioxide, providing habitat for wildlife, and maintaining the water cycle. The destruction of forests contributes to increased greenhouse gas emissions, loss of biodiversity, and disruption of ecosystems.

Q4: What are renewable energy sources?

A: Renewable energy sources are energy forms that are replenished naturally and are considered sustainable. Examples include solar energy, wind energy, hydropower, geothermal energy, and biomass. These sources are alternatives to fossil fuels and help reduce greenhouse gas emissions.

Q5: How can individuals reduce their carbon footprint?

A: Individuals can reduce their carbon footprint by adopting sustainable practices such as using public transportation, reducing energy consumption, recycling, using energy-efficient appliances, supporting renewable energy, eating a plant-based diet, and reducing waste.

Q6: What is the importance of water conservation?

A: Water conservation is essential to ensure that there is enough clean water for future generations. It helps protect our ecosystems, reduces the energy required for water treatment, and prevents water shortages. Simple actions like fixing leaks, using water-efficient fixtures, and reducing water waste can make a significant difference.

Q7: What is biodiversity, and why is it important?

A: Biodiversity refers to the variety of life forms on Earth, including plants, animals, fungi, and microorganisms. It is important because it supports ecosystem stability, provides food, medicine, and other resources, and contributes to cultural and recreational values. Preserving biodiversity ensures the resilience of ecosystems and human well-being.

Q8: What are the effects of plastic pollution on marine life?

A: Plastic pollution poses a severe threat to marine life. Marine animals can ingest plastic debris, leading to injuries, malnutrition, and death. Additionally, plastic waste can entangle marine creatures, causing drowning or restricting their movement. Microplastics, tiny plastic particles, can also accumulate in the food chain, affecting the entire marine ecosystem.

Q9: How does urbanisation affect the environment?

A: Urbanisation can lead to habitat destruction, increased pollution, higher energy consumption, and greater waste production. It can also contribute to the urban heat island effect, where cities experience higher temperatures than surrounding rural areas. Sustainable urban planning is necessary to mitigate these environmental impacts.

Q10: What are some ways to promote environmental sustainability?

A: Promoting environmental sustainability involves adopting practices that minimise environmental harm and preserve resources for future generations. This can include supporting green businesses, reducing waste, using renewable energy, conserving water, protecting natural habitats, and educating others about the importance of environmental stewardship.