

ENGLISH ESSAY

TEST # 1

TOPIC:

Climate Change: Causes and Consequences

Outline:

1. Introduction:

1.1 Attention Grabber

1.2 Supporting Sentences

1.3 Thesis Statement: The human activities leading to climate change include fossil fuel combustion, massive deforestation, rapid industrialization and urbanization, and poor agricultural practices. Climate change, in turn, has adverse impacts on the environment, human health, biodiversity, economy as well as politics.

2. Main Body

A. Causes of Climate Change:

2.1. Natural Causes:

2.1.1 Volcanic Eruptions

2.1.2 Solar radiation variations

2.1.3 Tectonic shifts

2.1.4 Natural greenhouse gas emissions

2.2. Human Activities:

2.2.1 Fossil Fuel Combustion:

- a. Burning of fossil fuels to meet the energy demands of the growing population
- b. Addition of carbon dioxide (CO_2) and methane (CH_4) into the atmosphere

2.2.2 Massive Deforestation:

- a. Loss of carbon sinks
- b. Increased CO_2 levels

2.2.3 Rapid Urbanization

2.2.4 Rapid Industrialization:

- a. CFCs, VOCs and nitrous oxide (N_2O) emissions leading to ozone depletion and global warming

2.2.5 Agricultural Practices:

- a. Livestock emissions
- b. Rice paddies

B. Consequences of Climate Change

2.1. Environmental Impacts:

2.1.1 Melting of ice caps and glaciers

2.1.2 Rising sea levels

2.1.3 Changes in precipitation patterns

2.1.4 Desertification

2.1.5 Extreme weather events and disasters

2.1.6 Wildfires

2.2. Human Health Hazards:

2.2.1 Spread of diseases, such as dengue, malaria and typhoid

2.2.2 Heat-related illnesses

2.2.3 Heat waves causing deaths

2.3. Biological Impacts:

2.3.1 Changes in ecosystems and habitats

2.3.2 Impact on wildlife and plant species

2.3.3 Loss of biodiversity

2.4 Economic Impacts:

- 2.4.1 Reduced crop yields leading to food scarcity
- 2.4.2 Property damage and insurance costs

2.5 Social and Political Instability

- 2.5.1 Climate Refugees
- 2.5.2 Resource Conflict

C. Mitigation and Adaptation Strategies

2.1. Mitigation Strategies:

2.1.1 Reducing greenhouse gas emissions by shifting from non-renewable to renewable energy sources

2.1.2 Increasing global forest cover through reforestation and afforestation

2.1.3 Carbon capture and storage (CCS)

2.1.4 Spreading awareness among public through social media

2.2. Adaptation Strategies:

2.2.1 Building resilient infrastructure

- 2.2.2 Developing early warning systems
- 2.2.3 Implementing sustainable transport, agriculture and industrial practices
- 2.2.4 Policy and governance changes

3. Conclusion

THE ESSAY

A famous statement by the UN Secretary General, Antonio Guterres, in 2023 warning the world about the disastrous impacts of climate change was, "The era of global warming has ended; the era of global boiling has arrived." Climate change is a global phenomenon. It refers to the long-term shifts in temperatures and weather patterns of the world. These shifts may be natural, but since the 1800s, human activities have been the main driver of climate change. These activities produce heat-trapping gases in the atmosphere,

also known as greenhouse gases, which leads to global warming and climate change. The developed as well as the developing world both are facing the terrifying consequences of this global climate change. The world is now warming faster than any point in recorded history. The human activities primarily contributing to climate change include combustion of fossil fuels, massive deforestation, rapid industrialization and urbanization, and poor agricultural practices. The climate change, in turn, has adverse impacts on the environment, human health, biodiversity, economy and even politics. It is therefore crucial to adopt certain mitigation and adaptation strategies in order to redress this burning issue of climate change and reduce its devastating impacts on the planet Earth.
