

Date: _____

Expository Essay Day: _____

Climate Change: Causes and Consequences

Outline

1. Introduction:

Focus more on argumentation instead of references (as it is an essay, not a research paper/report)

a. Hook

b. Climate change is a long-term shift in temperature, ~~in~~ ^{climate} pattern and other atmospheric conditions on Earth.

c. Thesis Statement: Climate change is primarily caused by human activities such as agricultural practices, improper waste management, rapid urbanization, industrialization, transportation, and burning of fossil fuels. These factors are driving factors of climate change which has ^{have} adverse consequences on human life and environment. These consequences include melting ice, impact on biodiversity, acidification of oceans, social and economic impact, rising global temperature, and extreme weather events.

Thesis statement should be precise

2: Main Body:

A. Causes of Climate Change:

a. Agricultural Practices:

- (i). Use of Technologies, Heavily Run on Fossil Fuels.
- (ii). Emission of Green House Gases
- (iii). Water Pollution
- (iv). Report Reference;
Contribution of Agricultural Sector is about 25% (IPCC).

b. Improper Waste Management:

- (i). Animal waste
- (ii). Industrial waste
- (iii). Plastic waste
- (iv). Report Reference;
Over 3.3 million tons plastic ends up as a waste annually in Pakistan; one of the highest percentages in South Asia (UNDP 2021)
- (v) By 2050, there could be more plastic than fish in the ocean by weight if the current trends continue.
(The Ellen Mac Arthur Foundation).

c. Rapid Urbanization:

- (i) 54%^{percent} of the world population urbanized - (United Nation's Report 2015).
- (ii) Destruction of Forests
- (iii) Increase in Energy Demand.

d. Industrialization:

- (i) Report Reference; Industrial sector is contributing 29% in climate change. - (IPCC).
- (ii) Higher Emission of GHGs By Industrial Sectors
- (iii). Environmental Protection Agency's Report Reference.
- (iv) Deforestation.

e. Transportation

- (i) Heavy use of Fossil Fuels
- (ii) Emission of Harmful Gases (CO_2 , CH_4 , SO_2 , NO_x)
- (iii) Air Pollution
- (iv) Report Reference.

f. Burning of Fossil Fuels

- (i) Largest Contributor to

Date: _____

Day: _____

Climate change; responsible for over 75% of Global GHG's emissions.

- (ii). Enhanced Greenhouse Effect
- (iii). Increased Concentrations of Gases
- (iv). Report Reference

B. Consequences Of Climate Change:

a. Melting Ice:

- (i) Rising Sea Level
- (ii) Loss of Habitat
- (iii) Increase of chances of Floods
- (iv) Feedback Loops

b. Impact on Biodiversity:

- (i) Shifts in Habitats
- (ii) Endangered Species

c. Acidification of Ocean:

- (i) Reference, The State of Climate annual Report by UN's world Meteorological Organization
- (ii) Threat to Marine Life

d. Social and Economic Impacts:

- (i) Population Displacement Due to Floods ✓
- (ii) Food Insecurity ✓
- (iii) 333 million people affected by food insecurity in 2023. ✓
- (iv) Economic losses. ✓

e. Rising Global Temperature,

- (i) Intense Heatwaves ✓
- (ii) Recent Examples of Heatwaves ✓
- (iii) Record Breaking Temperature Records ✓
- (iv) Drought Wildfire Eruptions
- (v) Wildfire Examples ✓

f. Extreme Weather Events:

- (i) Heavy Rainfall and Floods ✓
- (ii) In 2023, heavy loss of life in Libya due to extreme rainfall from Mediterranean cyclone Daniel. ✓
- (iii) Tropical Cyclone Example ✓

c. Solutions:

- a. Improving Waste Management and Disposal
- b. Policies And Regulations
- c. International Cooperation
- d. Public Awareness.

3. Conclusion:

"The long-term threat is that if we don't solve climate change, we don't save lives" - Bill Gates.

Earth is surrounded by a blanket of gases. These gases are present in specific concentrations.

Human activities and some natural events cause change in the concentrations of these gases, disrupting the natural setting of the environment.

Some gases trap into the Earth's atmosphere, increasing the temperature of the Earth. It is just as when we have fever our body temperature rises. Similarly, when Earth has fever its average temperature increases. This fever is being caused by human activities by adding gases into the atmosphere.

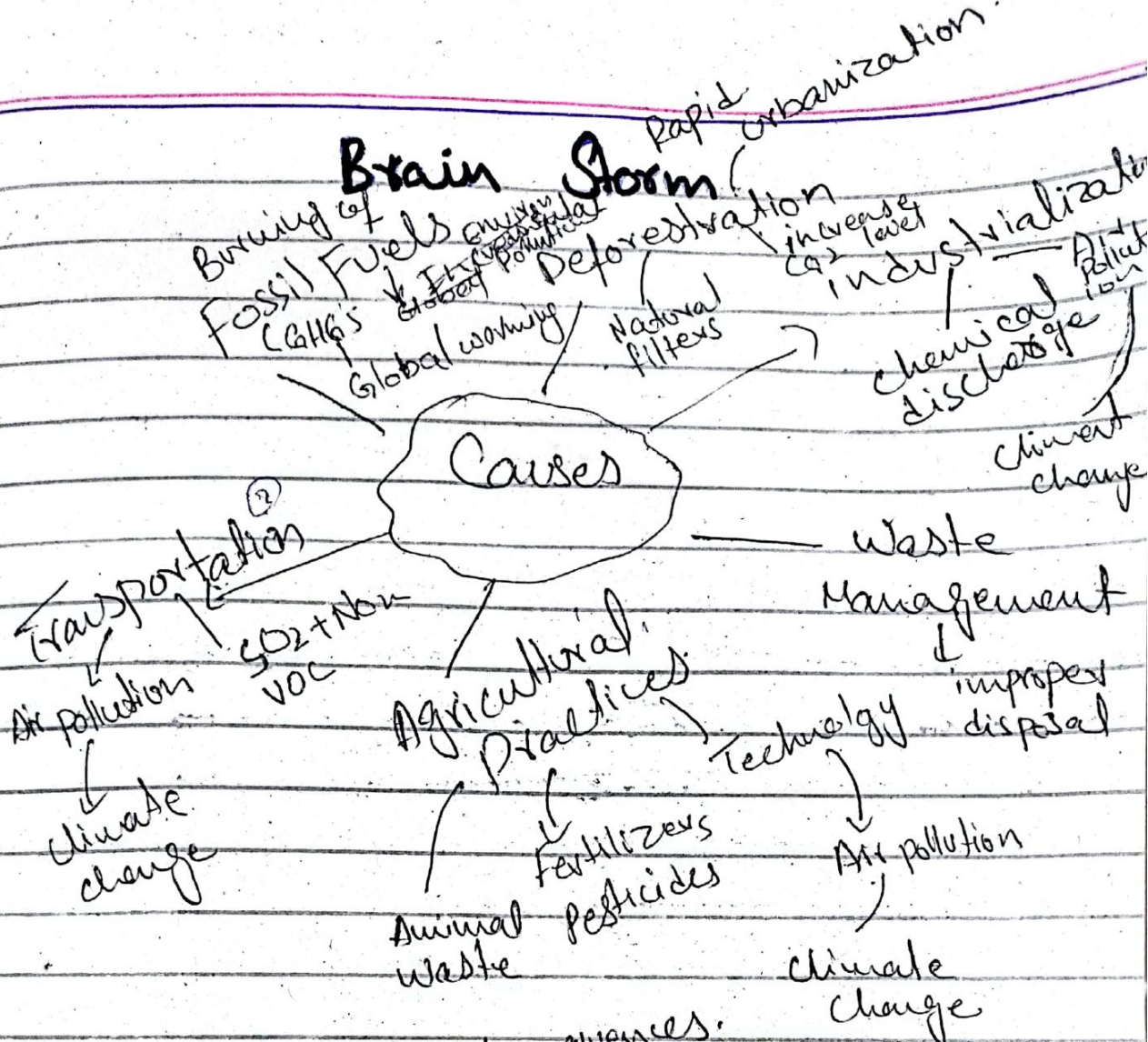
The extra heat by the addition of gases is causing changes in our climate. Climate change is a long-term shift in temperature

Date: _____

Day: _____

rainfall patterns, and other atmospheric conditions on Earth. Climate change is primarily caused by human activities such as agricultural practices, improper waste management, rapid urbanization, industrialization, transportation, and burning of fossil fuels. These factors are driving climate change. It has adverse consequences on human life and environment. These consequences include melting ice, impact on biodiversity, acidification of ocean, social and economic impact, rising global temperature, and extreme weather events.

Brain Storm



Economic consequences.

