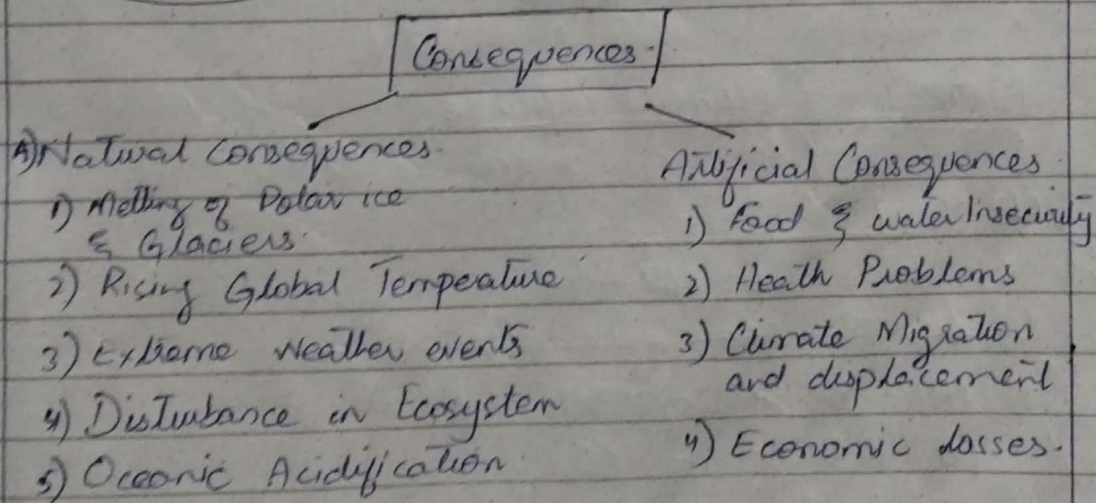
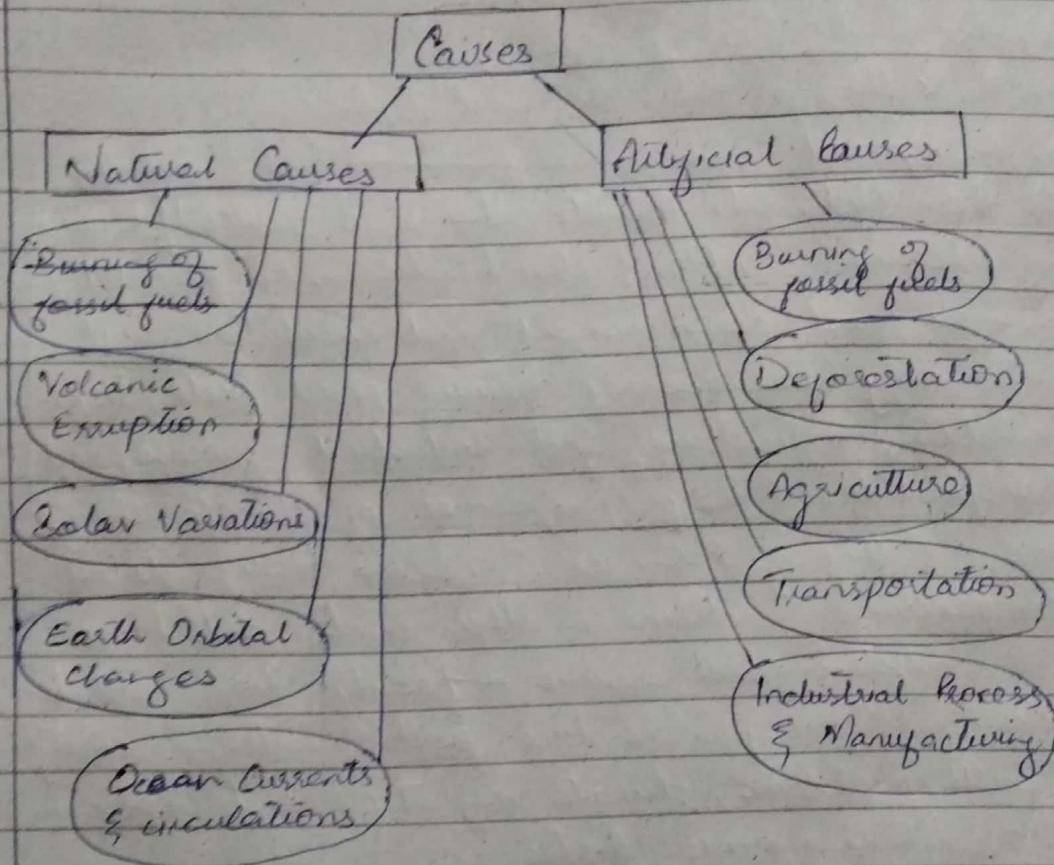


Outline

Climate Change: Causes and Consequences

Brain Storming



Climate Change: Causes and Consequences

Outline

Introduction

a) Hook

b) Background

c) Thesis Statement: Climate change is caused ^{naturally} because of volcanic eruption, solar variations, Earth orbital changes, and ocean current and circulation and artificially because of Burning fossil fuels, Deforestation, Agriculture and Industrial processes and transportation. The ^{Natural} consequences of climate change are, Melting of Polar ice & glaciers, rising global temperature, extreme weather events, disturbance in ecosystem and oceanic acidification and its artificial consequences are food & water insecurity, health problems, climate migration and displacement and economic losses.

Drivers of Climate Change

(1) Natural Drivers:

(i) Volcanic Eruption:

(a) ~~Formation of molten Rocks.~~

(a) Emission of SO_2

(b) Release of CO_2

(c) Injection of Ash.

(ii) Solar Eruptions:

- (a) Variation in solar radiations
- (b) Coronal mass ejections (CMEs)

(iii) Earth Orbital Changes:

- (a) Shape of earth's orbit
- (b) Axial tilt (The angle of Earth's Axis)
- (c) The Wobble of Earth's Axis.

(iv) Oceanic Current and Circulation:

- (a) Global Conveyor Belt.
- (b) Atmosphere Interactions of Ocean.
- ~~(i)~~ (i) El-Nino & La-Nino Phenomenon.

~~(i)~~

(2) Artificial Drivers:

- (i) Burning of fossil fuels.
 - (a) Excessive emission of CO_2
 - (b) Release of Greenhouse Gases (CH_4 and NO_2)

~~(i)~~

(ii) Deforestation:

- (a) Emission of absorbed CO_2
- (b) Global warming.

(iii) Agriculture & Industrial Processes:

- (a) Emission from livestock
- (b) Use of Fertilizers.
- (c) Chemical manufacturing processes
- (d) Industrial waste and pollution.

(iv) Transportation:

- (a) Emission from fossil fuels.

(b) Aviation & Air Travel

(c) Maritime Transport and Shipping

B) Consequences of a Changing Climate:

1) Natural Consequences:

(i) Melting of Polar Ice and Glaciers.

(a) Rising Global Temperature Coastal flooding

(b) Rising Sea Level

(c) Ocean currents and weather patterns

ii) Rising Global Temperature

(a) Frequent Heat Waves

(b) Ocean Warming

iii) Extreme Weather events

(a) Flash Floods & Heavy Rainfall

(b) Wildfires & Forest Degradation

(iv) Disturbance in Ecosystem:

(a) Alteration of Natural Habitats

(b) Marine life disruption

(c) Disruption of Species interactions

(v) Oceanic Acidification

(a) Impact on Marine Organisms

(b) Economic & Human Implications

2) Artificial Consequences:

(i) Food and Water Insecurity

- (a) Agriculture Productivity reduction
- (b) Increase in soil degradation
- (c) Impact on Fisheries

(ii) Health Problems:

- (a) Increase in Heat strokes
- (b) Spread of Vector-Borne Diseases
- (c) Water and Food Borne Diseases

(iii) Climate Migration and Displacement

- (a) Rise in Sea level and coastal flooding
- (b) Rise in Human Migration

(iv) Economic Losses:

- (a) Damages due to flood
- (b) Losses of Agriculture & Livestock
- (c) Impact on Tourism

Conclusion: