

Homework Assignment # 1:

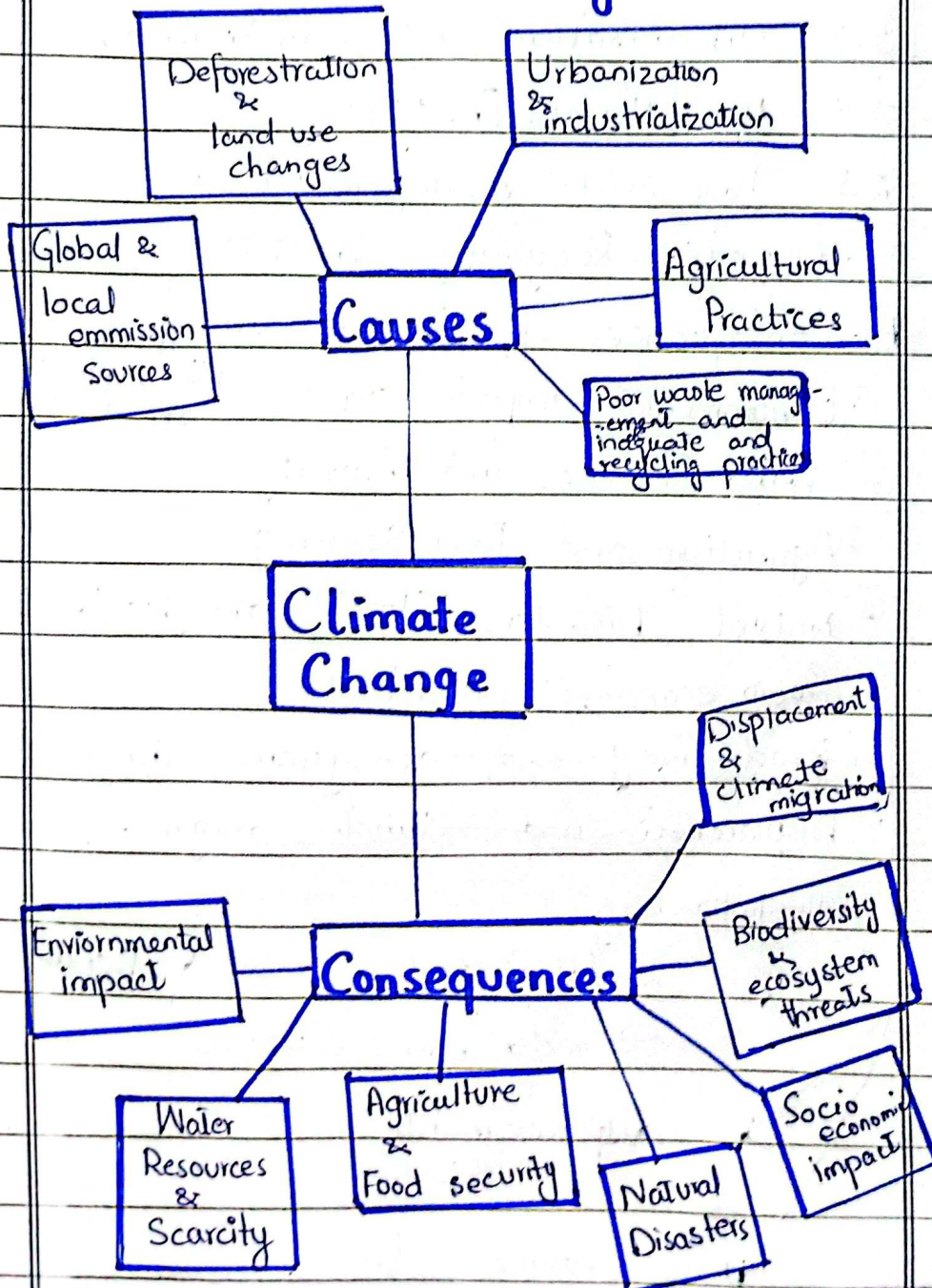
Topic : "Climate Change in Pakistan: Causes & Consequences."

Brain storm the above topic, draft the outline, and write the **introductory paragraph**

ESSAY PRACTICE

Climate Change In Pakistan: Causes and Consequences

Brainstorming



Outline:

1. Introduction

- - Hook: A startling fact about climate change in Pakistan
- - Brief context on Pakistan's vulnerability
- - Thesis Statement: Pakistan faces severe climate challenges due to global and local factors leading to environmental, economic and social crises that demand immediate action at both national and international level.

2. Causes of Climate Change in Pakistan

2.1 Global and Local Emission Sources

- - Pakistan's minimal global contribution vs. disproportionate vulnerability
- - Local emission from fossil fuels, transport and energy sector.
- - Transboundary pollution impact from neighboring countries.

2.2 Deforestation and Land use changes

- - Forest cover loss in northern regions and mangroves in the south

- - Unsustainable logging and land conversion for agriculture

- - Soil degradation and desertification trends

2.3 Urbanisation and Industrialization

- - Unplanned urban sprawl and energy demands

- - Industrial emission and weak regulatory framework

- - Heat island effects in major cities

2.4 Agricultural Practices

- - Methane emission from rice paddies and livestock

- - Excessive ground water extraction and chemical fertilizer use

- - Burning of crop residues and land clearing fires

2.5 Poor Waste Management and recycling practices

- - Open dumping and methane release from landfills

- - Plastic pollution in rivers and coastal areas

- - Limited recycling infrastructure and public awareness

3. Consequences of Climate Change in Pakistan

3.1. Environmental Impact

- Accelerated glacier retreat in the Himalayas and Karakoram
- Rising sea levels threatening Karachi and Indus Delta communities
- Increased frequency of extreme weather events

3.2 Water Resources and Scarcity

- Shrinking Indus River flows and ground water depletion
- Conflicts over water resources between provinces
- Salt water intrusion in coastal aquifers

3.3 Agriculture and Food Security

- Crop yield losses in wheat, rice and cotton belts
- Shift in growing seasons and pest outbreak
- Malnutrition risks in Rural population

3.4 Increased Frequency of Natural Disasters

- Superfloods (e.g. 2010, 2022)
- Prolonged droughts
- Deadly Heatwaves exceeding 50°C.

3.5 Socioeconomic Impact

Climate induced migration to urban slums

Economic losses

Spread of vector-borne diseases and heatstrokes

3.6 Biodiversity and Ecosystem Threats:

- Decline of Indus River Dolphin and snow-leopard habitats.
- Coral bleaching in Gwadar and mangrove die-offs.
- Disruption of migratory bird routes in wetlands.

ESSAY

"Climate change is no longer some far-off problem; it is happening here; it is happening now"

- Barack Obama, Former President, US.

In the sweltering summer of 2022, one-third of Pakistan was submerged under floodwaters, displacing 33 million people - a humanitarian crisis comparable to relocating the entire population of Canada. This unprecedented disaster was not an isolated weather anomaly but rather the latest manifestation of an escalating climate emergency that has been building in Pakistan for decades. These climate crises stem from a complex interplay of global climate patterns and local environmental mismanagement, deforestation, uncontrolled urbanisation,

industrialization, unsustainable agricultural practices and inadequate waste management and recycling practices. As temperature is continuously rising, glaciers retreat at alarming rates and extreme weather events become more frequent and intense. Pakistan's food security, water resources, economic stability and social fabric face existential threats that demand immediate and coordinated actions at both national and international levels.

“Greenhouse gas emissions keep growing. Global temperature keep rising. And our planet is fast approaching tipping points that will make climate chaos irreversible.

We are on a highway to climate hell with our foot on the accelerator.”

- Antonio Guterres, Secretary General, UN.