

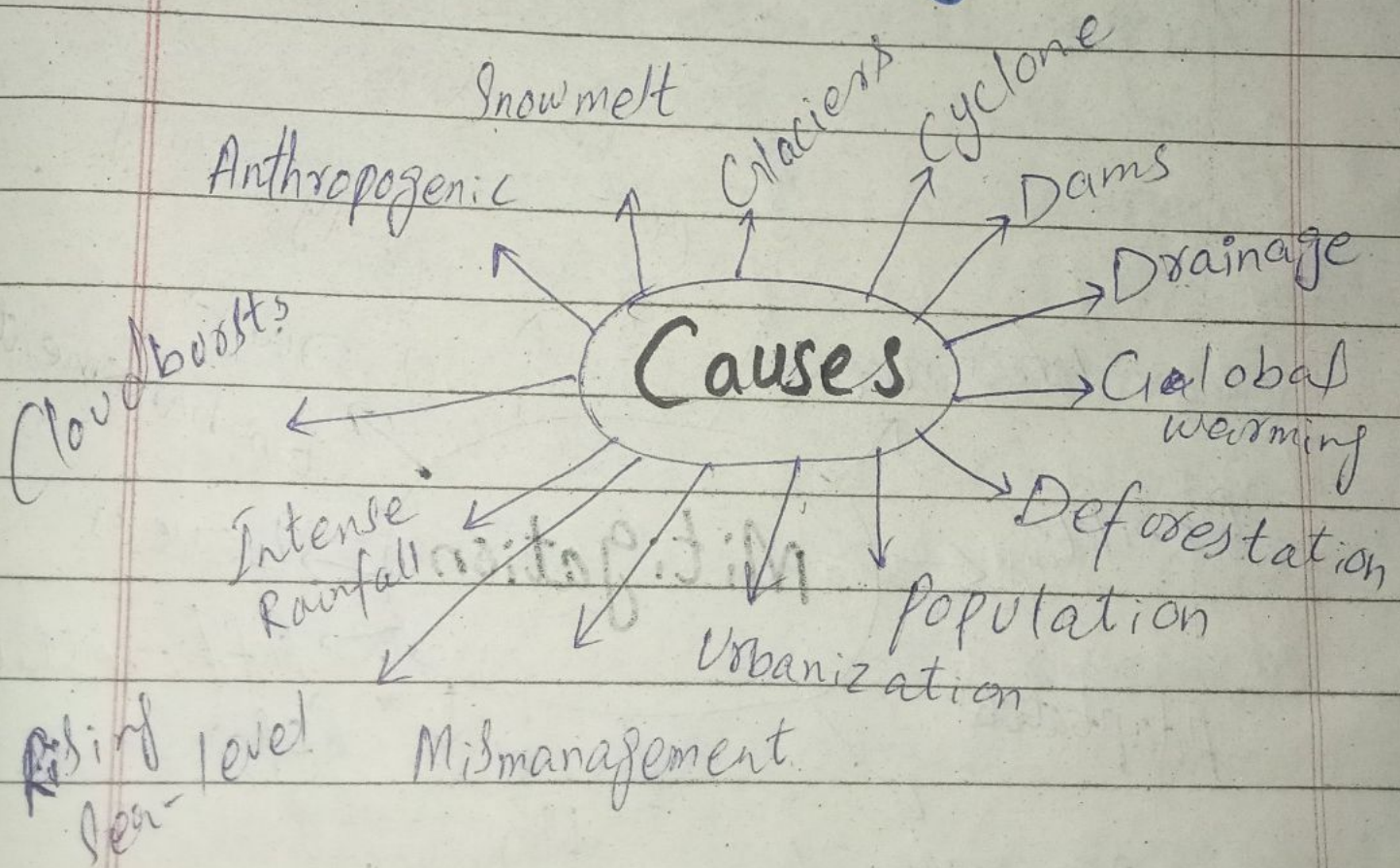
(i) Floods: Causes, Impacts,
and Mitigation

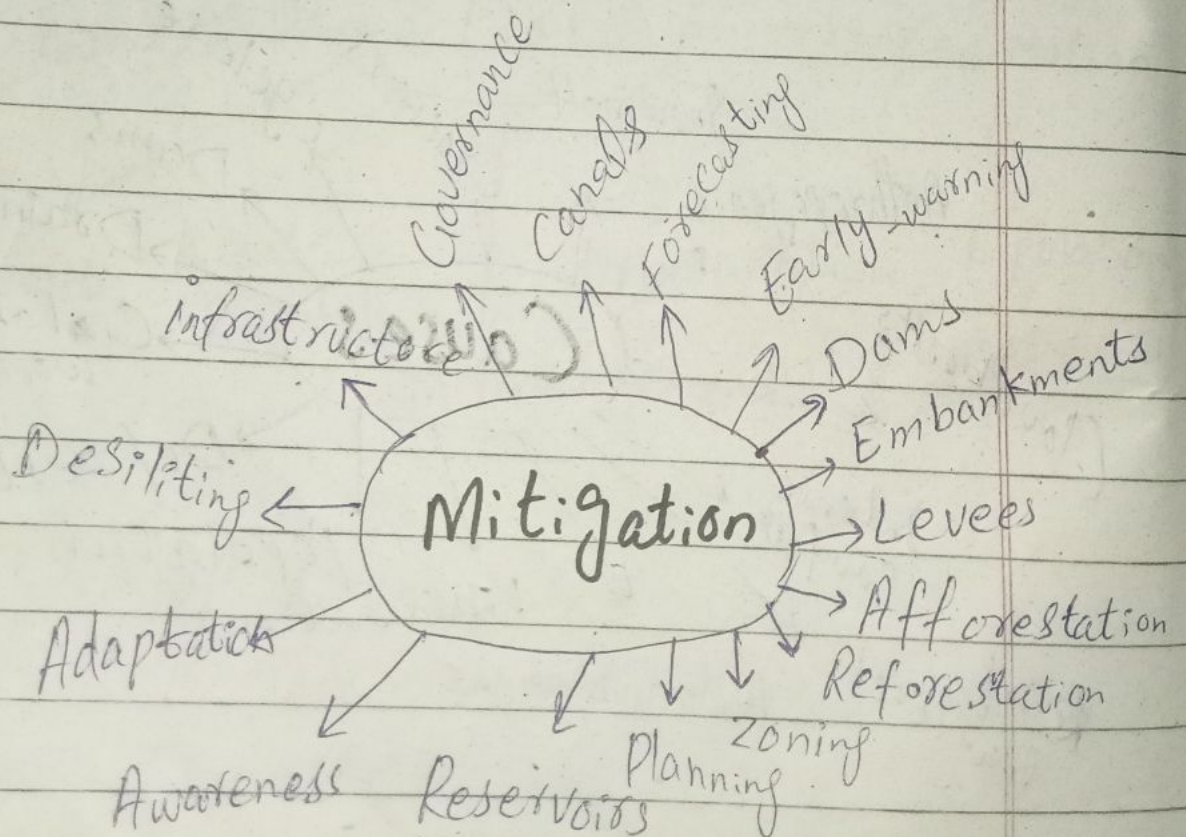
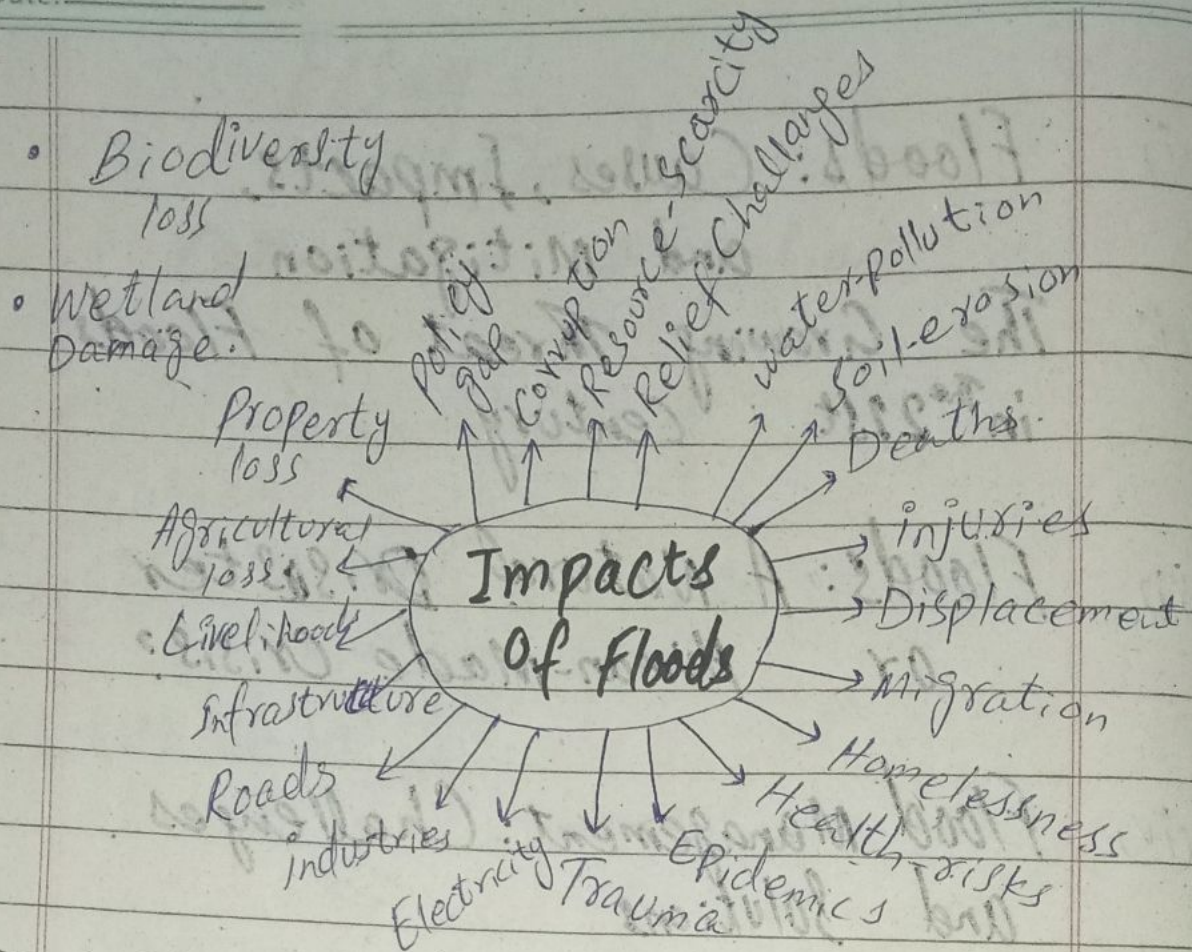
(ii) The Growing Threat of Floods
in ^{The} 21st Century

(iii) Floods: A Natural Disaster
or Human-Made Crisis?

(iv) Flood Management: Challenges
and Solutions

Brainstorming





Date: 20-12-25

Day: M T W T F S S

Essay Topic

- 1 Floods: Causes, Impacts and Mitigation
- 2 Floods as a multidimensional Challenge in the Era of Climate change

Outline

I Introduction

A° Hook

B Background

C **Thesis Statement:** Floods are no longer mere natural calamities; they are a complex outcome of climate change, anthropogenic interference, and governance failures, demanding integrated and sustainable mitigation strategies.

II Types of Floods

A Riverine floods

B Coastal floods

Date: _____

- C. Flash floods
- D. Urban floods

III Causes of Floods

- A. **Natural**: Rainfall, Monsoon, Cyclones, Snow/glacial melt.
- B. **Climate Related**: Global warming, Rising sea-level, Extreme weather
- C. **Human-Induced**: Deforestation, Urbanization, Overpopulation, poor drainage.

IV Floods Impacts of

- A. **Human/Social**: Deaths, Displacement, Health crisis.
- B. **Economic**: Agriculture, Infrastructure, Livelihoods
- C. **Environmental**: Soil erosion, water contamination, Biodiversity loss.
- D. **Governance**: policy gaps, Relief challenges.

V Case Study: Pakistan Floods

A. **Geography:** Indus River plains, coastal and northern areas.

B. **Historical floods:** 2010, 2022

C. **2025 Floods:**

- (i) intense monsoon + glacial melt caused severe flooding.
- (ii) 1000+ deaths, 3 million displaced, 12500+ houses damaged
- (iii) Major impact in Punjab, KP, Sindh, Gilgit-Baltistan. Highlights climate change link + governance gaps.
- (iv)

VI Flood Mitigation & Management

A. **Structural Measures:** Dams, Embankments, Drainage improvement.

B. **Non-Structural Measures:**

Afforestation, Reforestation, Zoning, Early warning, Community awareness.

VII Challenges in Mitigation

A. Governance weaknesses

Date: _____

Day: M T W T F S S

- B. Resource & implementation constraints.
- C. Climate unpredictability.

VIII Way Forward

- A. Integrated flood management
- B. Climate-resilient infrastructure
- C. Strengthening institutions and community preparedness.

IX Conclusion