COLLEGE TRB PAPER 2

VICTORY COUNTDOWN SERIES

DAY 1

DESCRIPTIVE ESSAYS

POINTS TO KEEP IN MIND

Read the question very carefully:

1. Understand the theme clearly
2. Write a crisp introduction
3. Use structured headings
4. Cover multi-dimensional analysis
5. Use Indian/TN examples
6. End with a thoughtful conclusion

If you follow this, you will consistently write high-scoring TRB-standard essays.

"Climate change is no longer an environmental issue alone; it is a developmental challenge." Analyse.

Climate change was once viewed primarily as an ecological concern—melting glaciers, rising temperatures, and extreme weather events. However, in the contemporary world, it has evolved into a profound developmental challenge that affects economies, public health, agriculture, infrastructure, water security, and social stability. Climate change now shapes the very trajectory of national development, especially for countries like India, where millions depend directly on climate-sensitive sectors. Understanding climate change as a developmental challenge is essential for designing long-term policies that protect both people and the planet.

1. Climate Change as a Threat to Economic Growth

a. Impact on Agriculture

Agriculture is highly dependent on temperature, rainfall, and soil moisture. Erratic monsoons, droughts, floods, and rising temperatures reduce crop yields, damage

livelihoods, and push farmers into distress. As agriculture supports a large share of India's rural population, climate-induced losses directly affect rural income, food security, and national GDP.

b. Loss of Infrastructure and Investments

Extreme events such as cyclones, floods, and heatwaves destroy roads, bridges, power supply systems, and communication networks. Urban centres face higher costs due to stormwater management, coastal erosion, and heat-related disruptions. These damages divert development funds from long-term growth to disaster recovery.

2. Climate Change and Human Development

a. Public Health Challenges

Rising temperatures increase heatstroke cases, vector-borne diseases such as dengue and malaria, and respiratory illnesses due to pollution. Changing rainfall patterns affect drinking water availability and sanitation, worsening malnutrition and public health outcomes. Thus, climate change directly affects life expectancy, productivity, and healthcare systems.

b. Water Stress and Social Inequality

Climate change disrupts rivers, groundwater, and rainfall cycles, increasing water scarcity in many regions. Water stress leads to competition between agriculture, industry, and households, often fuelling conflict. Marginalized communities suffer the most, increasing social inequality and weakening inclusive development.

3. Impact on Urbanisation and Migration

a. Climate-Induced Migration

Loss of livelihoods in agriculture, fisheries, and coastal communities forces people to migrate to cities. Unplanned migration creates pressure on urban housing, sanitation, and employment systems, worsening urban poverty.

b. Stress on Urban Infrastructure

Heatwaves require increased cooling, raising electricity demand. Intense rainfall overwhelms drainage systems, causing urban flooding. Coastal cities face long-term threats from rising sea levels. Thus, climate resilience must now be integrated into urban planning and development.

4. Threat to Energy Security and Industrial Growth

a. Disruption of Energy Production

Thermal power plants depend heavily on water. Rising temperatures and reduced river flow affect their capacity. Hydropower projects face reduced output due to changing rainfall and glacial melt patterns. Renewable energy development also requires climate-resilient planning.

b. Supply Chain Disruptions

Industries face production losses due to heat stress on workers, interrupted transportation, and damage to raw materials. This slows industrial growth and reduces employment generation, affecting national development goals.

5. Climate Change as a Governance and Policy Challenge

a. Need for Climate-Resilient Development

Governments must now integrate climate adaptation into all sectors—agriculture, infrastructure, energy, forestry, water, and urban development. Budget allocations increasingly prioritize climate mitigation, leaving less space for other developmental needs.

b. Balancing Growth with Sustainability

Developing countries must balance economic aspirations with ecological limits. Overexploitation of natural resources accelerates climate impacts, creating a cycle of vulnerability. Sustainable development, therefore, becomes the only practical pathway.

Climate change is no longer a distant ecological concern—it has become a central developmental challenge that affects economic stability, social welfare, public health, and national security. It tests the resilience of infrastructure, threatens food and water systems, increases inequality, and reshapes migration patterns. Addressing climate change is therefore not optional; it is fundamental to achieving long-term development. Countries must adopt climate-sensitive planning, strengthen disaster resilience, invest in clean energy, and promote sustainable livelihoods to ensure a secure and equitable future. Climate action and development are no longer separate goals—they must move together.
