

Factors Affecting India's Climate

Chapter 9: Climate · Topic 1

Key Concept

India's location mostly within the tropics leads to generally warm temperatures, while altitude makes Himalayan regions much cooler than lower-lying areas.

The Himalayas act as a barrier, blocking cold winds from Central Asia in winter and trapping monsoon winds to cause rainfall, significantly shaping India's seasonal weather patterns.

Distance from the sea affects temperature moderation - coastal areas have milder temperatures, while inland areas experience more extreme hot summers and cold winters.

The monsoon winds, especially the southwest monsoon, are the most significant factor, determining the timing and amount of rainfall that supports Indian agriculture each year.

Quick Revision Notes

- India's climate is shaped by latitude, altitude, sea distance, Himalayas and monsoons.
- India's tropical location leads to generally warm temperatures.
- Higher altitude areas, like the Himalayas, are cooler.
- The Himalayas block cold winds and trap monsoon rain.
- Coastal areas have milder temperatures than inland areas.
- Inland areas have more extreme temperatures.
- The southwest monsoon is the most significant climate factor.
- Monsoons determine rainfall timing crucial for agriculture.

Practice Questions

- 1 List the main factors affecting India's climate.
- 2 Discuss how altitude affects Himalayan climate.
- 3 Explain the Himalayas' role in blocking cold winds.
- 4 Compare coastal and inland temperatures.
- 5 Discuss why the monsoon is important for farmers.
- 6 Create a chart showing climate factors and their effects.