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NCERT Geography for Class 9th Chapter 4

Notes: Climate

Climatic Controls

1. Six Major Controls of Climate:

- The climate of any place is influenced by six major controls:
  a. Latitude
  b. Altitude
  c. Pressure and Wind System

d. Distance from the Sea (Continentality)
d. Ocean Currents
e. Relief Features

2. Latitude:

- Due to the curvature of the Earth, the amount of solar energy received differs by latitude.
- Temperature decreases from the equator towards the poles.

3. Altitude:

- As altitude increases, the atmosphere becomes less dense.
- Temperature decreases with height.
- Hence, hills are cooler during summers compared to plains.

4. Pressure and Wind System:

- The pressure and wind system of a region depends on latitude and altitude.
- It directly affects the temperature and rainfall pattern of that place.

5. Distance from the Sea (Continentality):

- The sea has a moderating effect on climate.
- Coastal regions: experience moderate climate (not too hot, not too cold).
- Interior regions: experience extreme climate (very hot summers, very cold winters) → this condition is called continentality.

6. Ocean Currents:

- Ocean currents along with onshore winds affect coastal climate.

- Example:
  a. Warm currents raise temperature.
  b. Cold currents lower temperature.

7. Relief Features:

- High mountains act as barriers to cold or hot winds.
- They also cause precipitation if they intercept rain-bearing winds.
- The leeward side of mountains remains relatively dry (rain shadow effect).

MCQs on NCERT Geography Class 9 Chapter 4 Topic – Climatic Controls

Here are the top exam-oriented MCQ-type questions on "*Climatic Controls*" that you should prepare for your CBSE or state board exams:

Question 1. How many major controls of climate are there?

a) Four
b) Five
c) Six
d) Seven

Answer: c) Six

Question 2. Which of the following is NOT a control of climate?

a) Latitude
b) Altitude
c) Longitude
d) Ocean currents

Answer: c) Longitude

Question 3. Due to the curvature of the Earth, the amount of solar energy received varies according to:

a) Altitude
b) Latitude
c) Ocean currents
d) Relief features

Answer: b) Latitude

Question 4. Air temperature generally decreases from:

a) Poles towards the equator
b) Equator towards the poles
c) Sea towards land
d) Coastal areas towards mountains

Answer: b) Equator towards the poles

Question 5. As one goes from the Earth's surface to higher altitudes, temperature:

a) Increases
b) Decreases
c) Remains constant
d) First increases then decreases

Answer: b) Decreases

Question 6. Why are hills cooler during summers?

a) Because of rainfall
b) Because atmosphere is dense
c) Because atmosphere is less dense at higher altitudes
d) Because they are near the sea

Answer: c) Because atmosphere is less dense at higher altitudes

Question 7. Pressure and wind system of any area depends on:

a) Longitude
b) Ocean currents
c) Latitude and altitude
d) Continentality

Answer: c) Latitude and altitude

Question 8. The pressure and wind system influences:

a) Soil fertility
b) Temperature and rainfall pattern
c) Ocean currents
d) Vegetation types

Answer: b) Temperature and rainfall pattern

Question 9. The sea exerts what kind of influence on climate?

a) Extreme
b) Moderating
c) No influence
d) Seasonal

Answer: b) Moderating

Question 10. As the distance from the sea increases, moderating influence:

a) Increases
b) Decreases
c) Remains constant
d) Becomes extreme

Answer: b) Decreases

Question 11. The condition in which places far from the sea experience extreme climate is known as:

a) Monsoon
b) Continentality
c) Tropicality
d) Insolation

Answer: b) Continentality

Question 12. Which statement is true about continentality?

a) Very hot during summers and very cold during winters
b) Moderate climate throughout the year
c) More rainfall in coastal regions
d) Always humid

Answer: a) Very hot during summers and very cold during winters

Question 13. Ocean currents along with onshore winds affect:

a) Forest cover
b) Climate of coastal areas

c) Soil fertility
d) Altitude of mountains

Answer: b) Climate of coastal areas

Question 14. A coastal area with warm or cold currents flowing past it will be:

a) Warmer or cooler depending on onshore winds
b) Always warm
c) Always cold
d) Unaffected

Answer: a) Warmer or cooler depending on onshore winds

Question 15. Relief plays a role in determining climate because:

a) High mountains act as barriers for winds
b) Mountains reduce temperature
c) Plains increase rainfall
d) Hills always remain dry

Answer: a) High mountains act as barriers for winds

Question 16. High mountains lying in the path of rain-bearing winds cause:

a) Increase in temperature
b) Decrease in humidity
c) Precipitation
d) No effect

Answer: c) Precipitation

Question 17. The side of the mountain which remains relatively dry is called:

a) Windward side
b) Leeward side
c) Coastal side
d) Plateau side

Answer: b) Leeward side

Factors Affecting India's Climate

Latitude

1. Tropic of Cancer in India:

- Passes through the middle of the country.
- Extends from Rann of Kuchchh (west) to Mizoram (east).

2. South of Tropic of Cancer:

- Covers almost half of India.
- Lies in the tropical zone.

3. North of Tropic of Cancer:

- Remaining part of India lies in the sub-tropical zone.

4. Climatic Characteristics:

- India's climate shows both tropical and sub-tropical features due to its latitudinal extent.

Altitude

1. Mountains in the North:

- Average height of about 6,000 metres.

2. Coastal Areas:

- Maximum elevation is about 30 metres.

3. Role of Himalayas:

- Act as a barrier against cold winds from Central Asia.

4. Climatic Impact:

- Due to the Himalayas, the Indian subcontinent has comparatively milder winters than Central Asia.

Pressure and Winds

1. Governing Atmospheric Conditions in India's Climate:

- Climate and weather are governed by:
  a. Pressure and surface winds
  b. Upper air circulation
  c. Western cyclonic disturbances and tropical cyclones

2. General Wind System over India:

- India lies in the region of northeasterly winds.

- These winds:
  a. Originate from the subtropical high-pressure belt of the northern hemisphere.
  b. Blow southwards, deflected to the right due to the Coriolis force.
  c. Move towards the equatorial low-pressure area.
- They carry little or no moisture as they blow over land.
- Hence, India should have been arid, but other factors change this (explained later).

3. Seasonal Pressure and Wind Conditions:

- **Winter Conditions:**
  a. A high-pressure area develops north of the Himalayas.
  b. Cold, dry winds blow from this region to low-pressure areas over southern oceans.
- **Summer Conditions:**
  a. A low-pressure area develops over interior Asia and northwestern India.
  b. This causes reversal of winds.
  c. Winds blow from high-pressure area of the southern Indian Ocean in a southeasterly direction,
  i. Cross the equator,
  ii. Turn right due to Coriolis force,
  iii. Move towards low-pressure areas of Indian subcontinent.
  d. These are called Southwest Monsoon Winds.
  e. They blow over warm oceans, gather moisture, and bring widespread rainfall in India.

4. Coriolis Force:

- An apparent force caused by earth's rotation.

- Deflects winds:
  a. Right in the Northern Hemisphere.
  b. Left in the Southern Hemisphere.
- Also known as Ferrel's Law.

MCQs on NCERT Geography Class 9 Chapter 4 Topic – Factors Affecting India's Climate

Here are the top exam-oriented MCQ-type questions on "*Factors Affecting India's Climate*" that you should prepare for your CBSE or state board exams:

Question 1. The Tropic of Cancer passes through India from:

a) Gujarat to Assam
b) Rann of Kuchchh to Mizoram
c) Rajasthan to Nagaland
d) Punjab to Tripura

Answer: b) Rann of Kuchchh to Mizoram

Question 2. Almost half of India lying south of the Tropic of Cancer belongs to:

a) Temperate area
b) Subtropical area
c) Tropical area
d) Polar area

Answer: c) Tropical area

Question 3. The area north of the Tropic of Cancer in India lies in:

a) Tropical region
b) Subtropical region
c) Polar region
d) Equatorial region

Answer: b) Subtropical region

Question 4. India's climate has characteristics of:

a) Only tropical climate
b) Only subtropical climate
c) Both tropical and subtropical climates
d) Temperate climate

Answer: c) Both tropical and subtropical climates

Question 5. Average height of mountains to the north of India is about:

a) 3,000 m
b) 4,500 m
c) 6,000 m
d) 8,000 m

Answer: c) 6,000 m

Question 6. Maximum elevation in India's vast coastal areas is about:

a) 15 metres
b) 20 metres
c) 30 metres
d) 60 metres

Answer: c) 30 metres

Question 7. Which mountain range prevents the cold winds from Central Asia from entering India?

a) Western Ghats
b) Himalayas
c) Aravallis
d) Vindhyas

Answer: b) Himalayas

Question 8. Why does India experience milder winters compared to Central Asia?

a) Due to tropical location
b) Due to long coastline
c) Due to Himalayas blocking cold winds
d) Due to monsoon winds

Answer: c) Due to Himalayas blocking cold winds

Question 9. The climate and weather conditions in India are governed by:

a) Only monsoons
b) Ocean currents

c) Pressure, surface winds, upper air circulation, western cyclones & tropical cyclones
d) Only altitude and latitude

Answer: c) Pressure, surface winds, upper air circulation, western cyclones & tropical cyclones

Question 10. India lies in the region of:

a) South-westerly winds
b) Northeasterly winds
c) Westerlies
d) Easterlies

Answer: b) Northeasterly winds

Question 11. Northeasterly winds originate from:

a) Subtropical high-pressure belt of the southern hemisphere
b) Subtropical high-pressure belt of the northern hemisphere
c) Equatorial low-pressure belt
d) Oceanic pressure zones

Answer: b) Subtropical high-pressure belt of the northern hemisphere

Question 12. Northeasterly winds blow:

a) Northwards
b) Southwards
c) Eastwards
d) Westwards

Answer: b) Southwards

Question 13. **Winds get deflected to the right in the northern hemisphere due to:**

a) Ocean currents
b) Coriolis force
c) Altitude difference
d) Rainfall pattern

Answer: b) Coriolis force

Question 14. **Generally, northeasterly winds bring:**

a) Heavy rainfall
b) Moderate rainfall
c) Little or no rainfall
d) Snowfall

Answer: c) Little or no rainfall

Question 15. **If northeasterly winds carry little moisture, India should have been:**

a) Tropical
b) An arid land
c) A desert island
d) An equatorial region

Answer: b) An arid land

Question 16. **During winter, a high-pressure area develops:**

a) Over southern Indian Ocean
b) Over Arabian Sea

c) North of Himalayas
d) Over Bay of Bengal

Answer: c) North of Himalayas

Question 17. During summer, a low-pressure area develops over:

a) Southern Indian Ocean and Africa
b) Interior Asia and northwestern India
c) Arabian Sea and Himalayas
d) Equator and Bay of Bengal

Answer: b) Interior Asia and northwestern India

Question 18. The complete reversal of wind direction during summer leads to:

a) Retreating monsoon
b) Onset of southwest monsoon
c) Cyclonic storms
d) Winter rains

Answer: b) Onset of southwest monsoon

Question 19. The winds from the southern Indian Ocean that cross the equator and turn right are called:

a) Westerlies
b) Easterlies
c) Southwest monsoon winds
d) Trade winds

Answer: c) Southwest monsoon winds

Question 20. Why do Southwest Monsoon winds bring rainfall to India?

a) They blow from land to sea
b) They blow over warm oceans and gather moisture
c) They originate in cold deserts
d) They carry dust particles

Answer: b) They blow over warm oceans and gather moisture

Question 21. Coriolis force is caused by:

a) Ocean currents
b) Earth's rotation
c) Altitude difference
d) Pressure belts

Answer: b) Earth's rotation

Question 22. Coriolis force is responsible for:

a) Rainfall
b) Wind deflection
c) Increase in temperature
d) Rise of ocean currents

Answer: b) Wind deflection

Question 23. In the northern hemisphere, Coriolis force deflects winds towards:

a) Right
b) Left
c) North
d) South

Answer: a) Right

Question 24. In the southern hemisphere, Coriolis force deflects winds towards:

a) Right
b) Left
c) North
d) South

Answer: b) Left

Question 25. Coriolis force is also known as:

a) Hadley's Law
b) Ferrel's Law
c) Walker's Law
d) Newton's Law

Answer: b) Ferrel's Law

The Seasons

1. Nature of Monsoon Climate:

- India has a monsoon type of climate.
- It is marked by a distinct seasonal pattern.

- Weather conditions change greatly from one season to another.

2. Regional Differences in Seasonal Changes:

- Interior parts of India:
  a. Seasonal changes are more noticeable.
- Coastal areas of India:
  a. Do not experience much variation in temperature.
  b. However, there is variation in rainfall pattern.

3. Major Seasons in India:

- India experiences four main seasons (with regional variations):
  a. Cold Weather Season (Winter)
  b. Hot Weather Season (Summer)
  c. Advancing Monsoon (Southwest Monsoon – Rainy season)
  d. Retreating Monsoon (Northeast Monsoon – Post-monsoon season)

The Cold Weather Season (Winter)

1. Duration of Cold Weather Season:

- Begins: Mid-November (northern India).
- Ends: February.
- Coldest months: December & January (northern India).

2. Temperature Conditions:

- Temperature decreases from south to north.
- Chennai (eastern coast): 24°–25°C.
- Northern Plains: 10°C–15°C.
- Day vs Night: Days are warm, nights are cold.
- Frost: Common in north.

- Snowfall: Higher Himalayan slopes.

3. Winds and Dry Conditions:

- Northeast trade winds prevail during this season.
- Blow from land to sea – dry season for most of India.
- Exception: Tamil Nadu coast – receives rainfall (winds blow sea to land here).

4. Pressure & Wind System:

- Feeble high-pressure region develops in northern India.
- Light winds move outwards from this region.
- Guided by relief, winds blow through Ganga Valley from west & northwest.
- Weather is marked by:
  a. Clear skies
  b. Low temperatures
  c. Low humidity
  d. Feeble & variable winds

5. Western Disturbances (Cyclonic Disturbances):

- Characteristic feature of cold weather season in northern plains.
- Originate: Mediterranean Sea & Western Asia.
- Carried by: Westerly flow into India.
- Impacts:
  a. Winter rains in northern plains (called 'Mahawat').
  b. Snowfall in Himalayan region.
- Importance: Essential for cultivation of Rabi crops.

6. Peninsular India in Winter:

- No well-defined cold season in peninsular India.
- Hardly any noticeable seasonal change in temperature.
- Reason: Moderating influence of the sea.

The Hot Weather Season (Summer)

1. Duration and Cause:

- Season months: March to May.
- Reason: Apparent northward movement of the Sun shifts the global heat belt northwards.

2. Temperature Pattern (March–May):

- March: Highest temperature ≈ 38°C – Deccan Plateau.
- April: ≈ 42°C – Gujarat & Madhya Pradesh.
- May: ≈ 45°C – Northwestern India.
- Peninsular India: Lower temperatures due to moderating influence of oceans.

3. Pressure System:

- Rising temperatures – falling air pressure in northern India.
- End of May: An elongated low-pressure trough develops:
  i. Extends from Thar Desert (NW) – Patna & Chotanagpur Plateau (E & SE).
- Circulation of air begins around this trough.

4. Local Winds and Weather Phenomena:

- **Loo:**
  a. Strong, gusty, hot, dry winds.
  b. Blow over north & northwestern India during daytime.

c. Can continue into evening.

d. Direct exposure can be fatal.

- **Dust storms:**

  a. Common in May (northern India).

  b. Bring temporary relief – lower temperature, cool breeze, light rain.

- **Localised thunderstorms:**

  a. Violent winds + torrential rain + hail.

  b. In West Bengal – called 'Kaal Baisakhi'.

5. Pre-Monsoon Showers:

- Common in Kerala & Karnataka.
- Help in early ripening of mangoes.
- Locally called 'Mango Showers'.

Advancing Monsoon (The Rainy Season)

1. Onset and Cause of Monsoon:

- By early June – Low-pressure condition over northern plains intensifies.
- This attracts southeast trade winds of the Southern Hemisphere.
- These winds:

  a. Originate over warm subtropical southern oceans.

  b. Cross the equator – deflected to southwest by Coriolis force.

  c. Enter India as Southwest Monsoon Winds.

2. Characteristics of Monsoon Winds:

- Bring abundant moisture from oceans.
- Strong winds with an average velocity of 30 km/hr.

- Cover almost the entire country in about a month (except extreme northwest).
- Cause a total change in weather conditions.

3. Rainfall Distribution in India:

- Western Ghats (windward side): Very heavy rainfall (> 250 cm).
- Deccan Plateau & Madhya Pradesh: Moderate rainfall (though in rain shadow zone).
- Northeastern India: Maximum rainfall.
  a. Mawsynram (Khasi Hills): Receives highest average rainfall in the world.
- Ganga Valley: Rainfall decreases from east to west.
- Rajasthan & parts of Gujarat: Very scanty rainfall.

4. Breaks in Monsoon:

- Monsoon shows wet and dry spells – rain for a few days, followed by dry intervals.
- Reason: Shifting of monsoon trough and its axis.
  a. When trough is over plains – good rainfall.
  b. When trough shifts near Himalayas – dry plains, heavy rain in Himalayan catchments – floods.

5. Role of Tropical Depressions:

- Form at the head of the Bay of Bengal.
- Move inland following the axis of monsoon trough.
- Frequency & intensity of depressions decide amount and duration of rainfall.

6. Uncertainties of Monsoon:

- Known for irregular arrival and retreat.
- Causes alternating floods and droughts in different regions.
- Disturbs farming schedules of millions of farmers.

Retreating/Post Monsoons (The Transition Season)

1. Timing and Cause of Retreat:

- Occurs during October–November.
- With the southward apparent movement of the Sun, the monsoon trough over northern plains weakens.
- Gradually replaced by a high-pressure system.
- Southwest monsoon winds weaken and start withdrawing gradually.
- By early October, monsoon withdraws from Northern Plains.

2. Transition Phase Features:

- Marks shift from hot rainy season – dry winter conditions.
- Clear skies and rise in temperature during withdrawal.
- Day temperatures high, but nights cool and pleasant.
- Weather becomes oppressive due to heat + humidity – called "October Heat".
- By second half of October, temperatures fall rapidly in northern India.

3. Shift of Low-Pressure Area:

- By early November, low pressure over northwestern India shifts to Bay of Bengal.
- This shift – associated with cyclonic depressions from Andaman Sea.

4. Tropical Cyclones in Post-Monsoon Season:

- Cyclones cross eastern coasts of India – cause heavy and widespread rain.
- These tropical cyclones are often destructive.
- Highly affected regions:
  a. Deltas of Godavari, Krishna, Kaveri (frequent cyclones).
  b. Sometimes hit Odisha, West Bengal, Bangladesh.
- Coromandel Coast: Major rainfall source is depressions and cyclones.

Do You Know?

- Mawsynram (Meghalaya) is the wettest place on Earth.
- It receives the highest average rainfall annually.
- Apart from rainfall, it is also famous for stalagmite and stalactite caves.
- These caves are formed due to the deposition of calcium carbonate over thousands of years.
- Mawsynram's unique rain + cave geography makes it a popular study site for both climatology and geology.

MCQs on NCERT Geography Class 9 Chapter 4 Topic – The Seasons

Here are the top exam-oriented MCQ-type questions on "*The Seasons*" that you should prepare for your CBSE or state board exams:

Question 1. How many main seasons can be identified in India?

a) 2
b) 3

c) 4
d) 5

Answer: c) 4

Question 2. Which of the following is not one of the four main seasons in India?

a) Cold Weather Season
b) Hot Weather Season
c) Advancing Monsoon
d) Winter Monsoon

Answer: d) Winter Monsoon

Question 3. Seasonal changes are most noticeable in:

a) Coastal areas
b) Interior parts of the country
c) Islands
d) Both (a) and (c)

Answer: b) Interior parts of the country

Question 4. Coastal areas of India mainly show variation in:

a) Temperature
b) Rainfall pattern
c) Pressure
d) Winds

Answer: b) Rainfall pattern

Question 5. The cold weather season in India lasts from:

a) October to December
b) November to February
c) December to March
d) January to March

Answer: b) November to February

Question 6. The coldest months in northern India are:

a) November and December
b) December and January
c) January and February
d) February and March

Answer: b) December and January

Question 7. In northern plains, the winter temperature ranges between:

a) 0°C – 5°C
b) 5°C – 10°C
c) 10°C – 15°C
d) 15°C – 20°C

Answer: c) 10°C – 15°C

Question 8. The average winter temperature of Chennai is:

a) 15°–20°C
b) 20°–22°C

c) 24°–25°C
d) 25°–30°C

Answer: c) 24°–25°C

Question 9. Which winds prevail over India during winters?

a) South-west monsoon
b) North-east trade winds
c) Westerlies
d) Jet streams

Answer: b) North-east trade winds

Question 10. Rainfall during winter on Tamil Nadu coast occurs because winds blow:

a) Land to sea
b) Sea to land
c) Both land to sea and sea to land
d) None of these

Answer: b) Sea to land

Question 11. The small amount of rainfall during winters in the northern plains is locally called:

a) Kal Baisakhi
b) Loo
c) Mahawat
d) Mango showers

Answer: c) Mahawat

Question 12. Western disturbances responsible for winter rain in India originate over:

a) Arabian Sea
b) Bay of Bengal
c) Mediterranean Sea and Western Asia
d) Indian Ocean

Answer: c) Mediterranean Sea and Western Asia

Question 13. Winter rainfall is important for the cultivation of:

a) Kharif crops
b) Rabi crops
c) Zaid crops
d) Cash crops

Answer: b) Rabi crops

Question 14. Which region of India does not have a well-defined cold season?

a) Northern Plains
b) Peninsular region
c) Himalayan region
d) Ganga valley

Answer: b) Peninsular region

Question 15. The hot weather season in India lasts from:

a) January–March
b) March–May

c) April–June
d) May–July

Answer: b) March–May

Question 16. The maximum temperature recorded in March is about:

a) 28°C
b) 32°C
c) 38°C
d) 45°C

Answer: c) 38°C

Question 17. The highest temperature of 42°C in April is recorded in:

a) Rajasthan and Gujarat
b) Gujarat and Madhya Pradesh
c) Punjab and Haryana
d) Tamil Nadu and Andhra Pradesh

Answer: b) Gujarat and Madhya Pradesh

Question 18. In May, temperatures of 45°C are common in:

a) Northwestern India
b) Deccan Plateau
c) Coastal Tamil Nadu
d) North-east India

Answer: a) Northwestern India

Question 19. The low-pressure trough developed in May extends from:

a) Deccan Plateau to Himalayas
b) Thar Desert to Patna and Chotanagpur Plateau
c) Punjab to Tamil Nadu
d) Kerala to West Bengal

Answer: b) Thar Desert to Patna and Chotanagpur Plateau

Question 20. The hot, dry, gusty winds blowing in northern India during summer are called:

a) Kal Baisakhi
b) Loo
c) Mango showers
d) Mahawat

Answer: b) Loo

Question 21. Local thunderstorms in West Bengal during summer are known as:

a) Mango showers
b) Loo
c) Kal Baisakhi
d) Nor'westers

Answer: c) Kal Baisakhi

Question 22. Pre-monsoon showers in Kerala and Karnataka are known as:

a) Mango showers
b) Kal Baisakhi
c) Nor'westers
d) October heat

Answer: a) Mango showers

Question 23. The advancing monsoon season begins by:

a) April
b) May
c) June
d) July

Answer: c) June

Question 24. South-west monsoon winds originate from:

a) Northern Hemisphere
b) Subtropical areas of Southern oceans
c) Arabian Sea
d) Bay of Bengal

Answer: b) Subtropical areas of Southern oceans

Question 25. Average velocity of monsoon winds is:

a) 10 km/hr
b) 20 km/hr
c) 30 km/hr
d) 50 km/hr

Answer: c) 30 km/hr

Question 26. The Western Ghats receive rainfall more than:

a) 100 cm
b) 150 cm
c) 200 cm
d) 250 cm

Answer: d) 250 cm

Question 27. The wettest place in the world is:

a) Cherrapunji
b) Mawsynram
c) Shillong
d) Guwahati

Answer: b) Mawsynram

Question 28. Rainfall in the Ganga Valley decreases from:

a) West to East
b) North to South
c) South to North
d) East to West

Answer: d) East to West

Question 29. Which of the following states receives scanty rainfall during monsoon?

a) Kerala
b) Gujarat and Rajasthan

c) West Bengal
d) Assam

Answer: b) Gujarat and Rajasthan

Question 30. Breaks in monsoon are caused due to:

a) Temperature variation
b) Monsoon trough shifting
c) Wind direction
d) Ocean currents

Answer: b) Monsoon trough shifting

Question 31. Tropical depressions influencing rainfall originate in:

a) Arabian Sea
b) Indian Ocean
c) Bay of Bengal
d) Red Sea

Answer: c) Bay of Bengal

Question 32. Retreating monsoon begins in:

a) August
b) September
c) October
d) November

Answer: c) October

Question 33. The retreat of monsoon is marked by:

a) Clear skies and rise in temperature
b) Heavy rainfall and storms
c) Strong winds
d) Decrease in temperature only

Answer: a) Clear skies and rise in temperature

Question 34. The oppressive weather during October is known as:

a) Loo
b) October Heat
c) Kal Baisakhi
d) Mango showers

Answer: b) October Heat

Question 35. Low-pressure conditions shift to the Bay of Bengal in:

a) October
b) Early November
c) Late November
d) December

Answer: b) Early November

Question 36. Cyclones during retreating monsoon usually originate over:

a) Arabian Sea
b) Andaman Sea
c) Bay of Bengal
d) Red Sea

Answer: b) Andaman Sea

Question 37. The deltas of which rivers are most affected by cyclones during retreating monsoon?

a) Ganga and Yamuna
b) Krishna, Godavari and Kaveri
c) Narmada and Tapi
d) Mahanadi and Indus

Answer: b) Krishna, Godavari and Kaveri

Question 38. The bulk of rainfall on the Coromandel Coast is derived from:

a) South-west monsoon
b) Western disturbances
c) Cyclones and depressions
d) Mango showers

Answer: c) Cyclones and depressions

Distribution Of Rainfall

1. High Rainfall Areas:

- Western coast and Northeastern India receive over 400 cm of rainfall annually.
- Example: Mawsynram and Cherrapunji (world's wettest places).

2. Low Rainfall Areas:

- Less than 60 cm of rainfall in:
  a. Western Rajasthan
  b. Parts of Gujarat, Haryana, Punjab
- Rainfall also low in:
  a. Interior Deccan Plateau
  b. East of the Sahyadris (rain-shadow region).
- Leh (Jammu & Kashmir) is another area of very low precipitation.

3. Moderate Rainfall Areas:

- Most of the country receives moderate rainfall (between 60–200 cm).

4. Snowfall:

- Restricted only to Himalayan region.

5. Variability of Rainfall:

- Rainfall is highly variable year to year due to monsoon nature.
- Variability is highest in low rainfall regions (Rajasthan, Gujarat, leeward side of Western Ghats).

6. Impact of Uneven Distribution:

- High rainfall areas – Flood-prone.
- Low rainfall areas – Drought-prone.

MCQs on NCERT Geography Class 9 Chapter 4 Topic – Distribution Of Rainfall

Here are the top exam-oriented MCQ-type questions on "*Distribution Of Rainfall*" that you should prepare for your CBSE or state board exams:

Question 1. Which regions of India receive over 400 cm of rainfall annually?

a) Western Rajasthan and Gujarat
b) Parts of western coast and northeastern India
c) Leh and Ladakh
d) Punjab and Haryana

Answer: b) Parts of western coast and northeastern India

Question 2. Which regions of India receive less than 60 cm of rainfall annually?

a) Northeastern states
b) Western Rajasthan, adjoining Gujarat, Haryana, Punjab
c) Western coast
d) Deccan Plateau

Answer: b) Western Rajasthan, adjoining Gujarat, Haryana, Punjab

Question 3. In which region of Jammu and Kashmir is rainfall very low?

a) Srinagar
b) Leh

c) Jammu
d) Pulwama

Answer: b) Leh

Question 4. Snowfall in India is mainly restricted to:

a) Deccan Plateau
b) Coastal areas
c) Himalayan region
d) Desert regions

Answer: c) Himalayan region

Question 5. Why does the interior of the Deccan plateau receive low rainfall?

a) Because it lies in the rain shadow region of the Western Ghats
b) Because it is close to the sea
c) Because it receives snowfall instead
d) Because it is a desert region

Answer: a) Because it lies in the rain shadow region of the Western Ghats

Question 6. Which side of the Sahyadris receives low rainfall?

a) Windward side
b) Coastal side
c) Eastern leeward side
d) Western slopes

Answer: c) Eastern leeward side

Question 7. Why is rainfall highly variable in India?

a) Because monsoons are uncertain and irregular
b) Because snowfall affects rainfall
c) Because India is close to the equator
d) Because of proximity to oceans

Answer: a) Because monsoons are uncertain and irregular

Question 8. Areas of high rainfall in India are more likely to face:

a) Earthquakes
b) Droughts
c) Floods
d) Landslides only

Answer: c) Floods

Question 9. Areas of low rainfall in India are more likely to be:

a) Drought-prone
b) Flood-prone
c) Cyclone-prone
d) Snowfall-prone

Answer: a) Drought-prone

Question 10. Which regions show high variability of rainfall in India?

a) Western Rajasthan, Gujarat, and leeward side of Western Ghats
b) Northeastern states

c) Coastal Kerala
d) Himalayan region

Answer: a) Western Rajasthan, Gujarat, and leeward side of Western Ghats

Monsoon As A Unifying Bond


Devastated by deluge
Haze hazard on road
Chennai submerged
After 2 days of biting cold, sun shines
Expect a ballistic winter after western winds are in
Hint of an early summer
Tuesday: 28.4 °C
FOG CHECK
Cold comfort for New Year revellers
A day Mumbai won't forget
Fog is in, get ready for disruptions
Freezing Kashmir
So, it's officially winter in the Capital
Delhi
Srinagar
Amritsar
Shimla

1. Role of the Himalayas:

- Himalayas protect India from cold central Asian winds.
- This allows northern India to have higher temperatures than other areas on the same latitude.

2. Moderating Effect of the Sea:

- Peninsular plateau surrounded by sea on three sides.
- This leads to moderate temperatures.

3. Temperature Variations:

- Despite influences of Himalayas and seas, great variations in temperature exist across India.

4. Monsoon as a Unifying Force:

- Monsoon creates a rhythmic seasonal cycle through:
  a. Seasonal alteration of wind systems.
  b. Associated weather conditions.
- Even uncertain and uneven rainfall is a typical feature of monsoon.

5. Impact on Natural & Human Life:

- Indian landscape, flora, fauna, agriculture, and festivals revolve around monsoon.
- Agricultural calendar of India is completely dependent on arrival of monsoon rains.

6. People's Dependence on Monsoon:

- People across north to south and east to west eagerly await the monsoon each year.
- Monsoon sets agricultural activities in motion.

7. Unifying Role of Rivers:

- River valleys, carrying monsoon-fed water, unite into single river valley units, strengthening unity.

MCQs on NCERT Geography Class 9 Chapter 4 Topic – Monsoon As A Unifying Bond

Here are the top exam-oriented MCQ-type questions on "*Monsoon As A Unifying Bond*" that you should prepare for your CBSE or state board exams:

Question 1. What protects the Indian subcontinent from extremely cold winds from Central Asia?

a) The Indian Ocean
b) The Himalayas
c) The Thar Desert
d) The Western Ghats

Answer: b) The Himalayas

Question 2. Why does northern India have uniformly higher temperatures compared to other areas on the same latitudes?

a) Because of the Western Ghats
b) Because of the Himalayas blocking cold winds
c) Because of the Arabian Sea
d) Because of the Thar Desert

Answer: b) Because of the Himalayas blocking cold winds

Question 3. Which physical feature keeps the Peninsular plateau's climate moderate?

a) The Himalayas
b) Surrounding seas on three sides
c) The Thar Desert
d) The Deccan Plateau

Answer: b) Surrounding seas on three sides

Question 4. What provides a unifying influence on the Indian subcontinent?

a) The Himalayas
b) The Thar Desert
c) The monsoon
d) The coastal plains

Answer: c) The monsoon

Question 5. Why are variations in temperature still observed in India despite moderating influences?

a) Because of uneven landforms and altitude
b) Because monsoon is unevenly distributed
c) Because the seas are far away
d) Because of snow in the Himalayas

Answer: a) Because of uneven landforms and altitude

Question 6. The rhythmic cycle of seasons in India is caused by:

a) The Himalayas and the Thar Desert
b) Seasonal alteration of wind systems
c) The coastal influence of oceans
d) Tropical location of India

Answer: b) Seasonal alteration of wind systems

Question 7. Which of the following is most typical of the Indian monsoon?

a) Uniform rainfall everywhere
b) Predictable and equal rainfall
c) Uncertainty and uneven distribution of rainfall
d) Heavy snowfall in winters

Answer: c) Uncertainty and uneven distribution of rainfall

Question 8. What revolves around the arrival of the monsoon in India?

a) Trade and industry
b) Only political events
c) Agricultural calendar, festivals, and daily life
d) Only urban life

Answer: c) Agricultural calendar, festivals, and daily life

Question 9. Why do people across India eagerly await the arrival of the monsoon every year?

a) It brings relief from heat
b) It sets agricultural activities in motion
c) It leads to snowfall in the north
d) It reduces floods

Answer: b) It sets agricultural activities in motion

Question 10. How do river valleys unite India?

a) By carrying monsoon water and forming a single unit
b) By separating agricultural regions
c) By creating deserts
d) By preventing monsoon entry

Answer: a) By carrying monsoon water and forming a single unit

Next & Previous Topics of NCERT/CBSE Geography Class 9 Chapter 4: Climate

Topics No.	Topics Name
1	Climatic Controls
2	Factors Affecting India's Climate
3	The Seasons
4	Distribution Of Rainfall
5	Monsoon As A Unifying Bond

Thank You


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