

CLASS-9
GEOGRAPHY
Chap-3 CLIMATE

Question 3:

Why does the rainfall decrease from the east to the west in Northern India?

Answer:

The amount of rainfall decreases from east to west in Northern India because of the progressive decrease in the humidity of the winds. As the moisture-bearing winds of the Bay of Bengal branch of the southwest monsoon move further and further inland, they exhaust most of the moisture they carry along with them. This consequently leads to a gradual decrease in the amount of rainfall from east to west.

Question 4:

Give reasons as to why.

(i) Seasonal reversal of wind direction takes place over the Indian subcontinent?

Answer:

The seasonal reversal of wind direction over the Indian subcontinent takes place due to pressure differential. El Nino has major role to play in the seasonal reversal of wind direction over the Indian subcontinent.

(ii) The bulk of rainfall in India is concentrated over a few months.

Answer:

The rainfall received by India is largely due to the south-west monsoon winds. The duration of the monsoon is between 100 to 120 days. Hence, the bulk of rainfall received by the country is concentrated over a few months.

(iii) The Tamil Nadu coast receives winter rainfall.

Answer:

During the winter season, north-east trade winds prevail over India. They blow from land to sea and hence, for most part of the country, it is a dry season. However, the Tamil Nadu Coast receives winter rainfall due to these winds. This is because in this region these winds blow from sea to land, thereby carrying moisture along with them.

(iv) The delta region of the eastern coast is frequently struck by cyclones.

Answer:

The delta region of the eastern coast of India is frequently struck by cyclones. This is because the cyclonic depressions that originate over the Andaman Sea are brought in by the sub-tropical easterly jet stream blowing over peninsular India during the monsoon as well as during the October to November period.

(v) Parts of Rajasthan, Gujarat and the leeward side of the Western Ghats are drought-prone.

Answer:

Parts of Rajasthan, Gujarat and the leeward side of the Western Ghats are drought-prone because of the scanty rainfall received by these regions during the monsoon rains. The progressive decrease in the humidity of the winds of the Bay of Bengal branch causes the amount of rainfall to decrease from east to west in northern India. As the leeward side is the rain-shadow area, the regions lying in this region receive very little rain from the Arabian Sea branch. It is the windward side of the Ghats that receives the maximum rain.

Question 5:

Describe the regional variations in the climatic conditions of India with the help of suitable examples.

Answer:

Despite the overall unity accorded by the monsoon, there are visible regional variations in climatic conditions within India. Influences of the Himalayas in the north and the moderating influence of the sea in the south, variations do exist in temperature, humidity and precipitation. For example, in summer, some parts of the Rajasthan desert, in north-western India, record temperatures of 50°C, while it may be around 20°C in Pahalgam in Jammu and Kashmir, in the north of the country. On a winter night, the temperature at Drass in Jammu and Kashmir may be as low as minus 45°C, while Thiruvananthapuram may have a temperature of 22°C. In general, coastal areas experience less contrasts in temperature conditions. Seasonal contrasts are more in the interior of the country.

Another case in point is precipitation. While precipitation is mostly in the form of snowfall in the upper parts of the Himalayas, it rains over the rest of the country. The annual precipitation varies from over 400 cm in Meghalaya to less than 10 cm in Ladakh and western Rajasthan. Most parts of the country receive rainfall from June to September, but some parts like the Tamil Nadu coast get most of their rain during October and November.