

India-Climate, Natural Vegetation and Wildlife

F. Long-answer questions:

1. What are the factors that are responsible for climatic changes in India?
2. North-western part of India receives rain and snow in the winter season. Give reasons.
3. During which seasons do the monsoon winds blow? How and when do they bring rainfall to various parts of India?
4. Study the map of the monsoon season and its retreat given in the text. What difference do you notice in the wind direction in the two maps? Explain.
5. Describe the Thorny Desert Forests in India.
6. Describe the Tidal Forests in India.
7. Why does India have a large variety of forests?
8. What steps has the Indian Government taken to conserve forests in India?
9. What steps has the Indian Government taken to conserve wildlife in India?

Solutions

F. Long-answer questions:

1.
 - (i) **Location**-Near the sea there is equable climate and far from the sea in the interior continental climate.
 - (ii) Latitudinal extent below the Tropic of Cancer.
 - (iii) **Relief**-Relief features because more rain on the windward side and less on the lee side. Aravallis are parallel to the winds so less rain in Rajasthan.
 - (iv) The higher one goes up into the atmosphere, the temperature decreases by 1°C for every 166 meters of ascent.
 - (v) Winds are affected by low and high pressure conditions as winds blow from high pressure to low pressure areas.
2. The north-west part of India receives rainfall and snow from the temperate cyclones that come from the Mediterranean region of Europe-eastwards towards India.
3. The south-west monsoon winds blow from the sea to land in the month of June to September, breaking into two branches—the Arabian Sea current and the Bay of Bengal current bringing rain to the whole of India. The north-east or retreating monsoons bring rain to the east coast of India in October- November.

4. After studying the two maps showing Asia—
- The South-west monsoon winds blow from high pressure areas over the sea to low pressure areas over the land from the South-west direction.
 - The north-east monsoons blow from high pressure areas over land to low pressure areas over the seas.
5. In dry areas of Rajasthan, where rainfall is less than 50 centimetres, the vegetation turns into scanty scrubs or bushes and is called Thorny Forest. The most important trees found here are various types of acacia, babul and kikar. These trees have long tap roots, small leaves and thorny branches. These trees are an important source of wood, tanning and dyeing material, catechu or kattha, etc. One can find thorny vegetation all through the Thar Desert, the leeward side of the Deccan Plateau and in large parts of Rajasthan, Punjab, Haryana, Andhra Pradesh and Gujarat.
6. All major rivers of India form deltas when they enter the sea or ocean. At the delta, the fresh water of the river gets mixed with the salty water of the sea during high tides. These deltas give rise to forests called Tidal Forests. Trees of Tidal Forests can survive both in the fresh water of the river and the salty water of the sea. Tidal Forests are found in India in two major regions: (i) The Ganga-Brahmaputra Delta, and (ii) Deltas of the Mahanadi, Godavari, Krishna and Kaveri rivers.
- Forests of the Ganga-Brahmaputra Delta are also known as Sunder bans. The Sunder bans are named after the well-known Sundri tree, best suited for boat-making and construction works. Tidal forests of the Sunder bans are found on the seaward side of the Ganga-Brahmaputra Delta. The Sundri tree is a well-known species of mangrove forests. Sundri trees have stilt-like supporting roots which remain underwater even during the high tides.
7. India has a wide variety of vegetation—
- India is a big country. It occupies a vast expanse on the world map. Both latitudinally and longitudinally, it extends beyond 30°. At certain places, its altitude can be measured more than 8,000 metres. It has a wide range of annual rainfall and temperature. In certain areas like the desert of Rajasthan, the annual rainfall is well below 25 centimetres whereas, in the wet areas of Meghalaya such as Mawsynram, the annual rainfall record may be well over 467 centimetres. With such varied climatic conditions, India has a wide range of natural vegetation and wildlife.
8. The Government of India is making policies to protect and conserve the forests. India, as per its plan, should have a forest cover amounting to 33% of the total land area. However, due to rapidly growing population there is an increasing demand of land for agriculture, industries and for the expanding towns and cities as well. As a result, we are now left with only 20.64% of forest-cover which is an alarming situation. The government started a plantation programme known as Vanmahotsav. To reduce global warming due to deforestation, trees are planted in large numbers to increase forest areas. All wastelands are brought under

plantation. In addition, both sides of the roads and hill slopes are being planted with trees. Strict laws have been made against illegal felling of trees.

The government has also made some forest reserves to conserve forests.

- It has announced awards such as Vrikshamitra to promote plantation of trees, and to prevent deforestation as well.
- The environmentalist Sunderlal Bahuguna has earned great fame as he has contributed significantly to stop deforestation.

- 9.** The Indian Government has made strict laws to protect wildlife in India. It has banned poaching as well as selling valuable body parts of animals such as bones, furs, skins and feathers. Project Tiger and Project Elephant have been started to protect these animals and increase their number.

Every year, we observe a Wildlife Week in the first week of October to create awareness among the citizens to conserve wildlife. We can also contribute in conserving wildlife by refusing to buy things made from parts of bodies of animals such as their bones, horns, fur, skins and feathers.