

NCERT MOST IMPORTANT QUESTIONS CLASS – 11

GEOGRAPHY GEOGRAPHY-INDIA PHYSICAL ENVIRONMENT CHAPTER- 5 NATURAL VEGETATION

Question 1.

“Natural vegetation is an outcome of climate.” Substantiate the statement by taking example of Indian vegetation.

Answer:

India is a land of great variety of natural vegetation. Himalayan heights are marked with temperate vegetation; the Western Ghats and the Andaman Nicobar Islands have tropical rain forests.

- Tropical evergreen forests are found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22°C. In these forests, trees reach at great heights up to 60 m or above. The semi-evergreen forests are found in the less rainy parts of these regions.
- Tropical deciduous forests are spread over regions which receive rainfall between 70-200 cm.
- The moist deciduous forests are more pronounced in the regions which record rainfall between 100-200 cm. Dry deciduous forest covers vast areas of the country, where rainfall ranges between 70-100 cm.
- Tropical thorn forests occur in the areas which receive rainfall less than 50 cm. In mountainous areas, the decrease in temperature with increasing altitude leads to a corresponding change in natural vegetation.
- The Himalayan ranges show a succession of vegetation from the tropical to the tundra, with change in the altitude. Deciduous forests are found in the foothills of the Himalayas. It is succeeded by the wet temperate type of forests between an altitude of 1,000-2,000 m. In the higher hill ranges of north-eastern India, hilly areas of West Bengal and Uttarakhand, evergreen broad leaf trees such as oak and chestnut are predominant. Between 1,500-1,750 m, pine forests are also well-developed in this zone, with Chir Pine as a very useful commercial tree.

Question 2.

Mention the reasons for the decline of wildlife in India?

Answer:

Important reasons for the decline of Wildlife in India are-

- Industrial and technological advancement brought about a rapid increase in the exploitation of forest resources.

- More and more lands were closed for agriculture, human settlement, roads, mining, resources, etc.
- Pressure on forests maintained due to logging for fodder and fuel, wood and removal of small timber by the local people.
- Grazing by domestic cattle caused an adverse effect on wildlife and its habitat.
- Hunting was taken up as a sport by the elite and hundreds of wild animals were killed in a single hunt. Now commercial poaching is rampant.
- Incidence of forest fire.

Question 3.

According to the statistics received from state records, there are differences in forest area and actual forest cover. Explain.

Answer:

According to state records, the forest area covers 23.28 percent of the total land area of the country. It is important to note that the forest area and the actual forest cover are not the same. The forest area is the area notified and recorded as the forest land irrespective of the existence of trees, while the actual forest cover is the area occupied by forests with canopy.

Forest area is based on the records of the State Revenue Department, while the actual forest cover is based on aerial photographs and satellite imageries.

According to India State of Forest Report 2011, the actual forest cover in India is only 21.05 percent. Of the forest cover, the share of dense and open forests is 12.29 and 8.75 percent respectively. Both forest area and forest cover vary from state to state.

Lakshadweep has zero percent forest area; Andaman and Nicobar Islands have 86.93 percent. Most of the states with less than 10 percent of the forest area lie in the north and northwestern part of the country. These are Rajasthan, Gujarat, Punjab, Haryana and Delhi.

States with 10-20 percent forest area are Tamil Nadu and West Bengal. In Peninsular India, excluding Tamil Nadu, Dadra and Nagar Haveli and Goa, the area under forest cover is 20-30 percent. The northeastern states have more than 30 percent of the land under forest. Hilly topography and heavy rainfall are good for forest growth. There is a lot of variation in actual forest cover, which ranges from 9.56 percent in Jammu and Kashmir to 84.01 percent in Andaman and Nicobar Islands.

Question 4.

On the basis of actual forest cover, in how many categories have Indian states been divided?

Answer:

On the basis of the percentage of the actual forest cover, the states have been grouped into four regions:

- The region of high concentration > 40: It includes Andaman and Nicobar islands, Mizoram, Nagaland, Arunachal Pradesh which have 80% of their total area under forests. Manipur, Tripura, Meghalaya, Sikkim and Dadar and Haveli have forest cover between 40-80%.
- The region of medium concentration 20-40: It includes Madhya Pradesh, Odisha, Goa, Kerala, Assam and Himachal Pradesh. In Goa, actual forest cover is 33.27% which is highest in this range. Thereafter, comes Assam and Orissa. In other states 30% of their area is covered with forests.
- The region of low concentration 10-20: It includes states of Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, Bihar and Uttar Pradesh.
- The region of very low concentration < 10: It includes states of Rajasthan, Punjab, Haryana, and Gujarat. It also includes union territories of Delhi and Chandigarh. It also includes West Bengal.

Question 5.

Explain in short about four important Biospheres of India.

Answer:

Four Biosphere Reserves have been recognised by the UNESCO on World Network of Biosphere Reserves. These are as follows:

1. Nilgiri Biosphere Reserve: The Nilgiri Biosphere Reserve (NBR) is the first of the fourteen biosphere reserves of India. It was established in September 1986. It embraces the sanctuary complex of Wyanad, Nagarhole, Bandipur and Mudumalai, the entire forested hill slopes of Nilambur, the Upper Nilgiri plateau, Silent Valley and the Siruvani hills. The total area of the biosphere reserve is around 5,520 sq. km. The largest south Indian population of elephant, tiger, gaur, sambar and chital as well as a good number of endemic and endangered plants are also found in this reserve. The topography of the NBR is extremely varied, ranging from an altitude of 250 m to 2,650 m. About 80 percent of the flowering plants reported from the Western Ghats occur in the Nilgiri Biosphere Reserve.
2. Nanda Devi Biosphere Reserve: The Nanda Devi Biosphere Reserve is situated in Uttarakhand. It includes parts of Chamoli, Almora, Pithoragarh and Ba'geshwar districts. The major forest types of the reserve are temperate. A few important species are silver weed and orchids like latifolie and rhododendron. The biosphere reserve has a rich fauna like the snow leopard, black bear, brown bear, musk deer, snow- cock, golden eagle and black eagle.
3. Sunderbans Biosphere Reserve: It is located in the swampy delta of the river Ganga in West Bengal. It extends over a vast area of 9,630 sq. km and consists of mangrove forests, swamps and forested islands. Sunderbans is the home of nearly 200 Royal Bengal tigers. More than 170 birds species are known to inhabit these mangrove forests. In the Sunderbans, the mangrove forests are characterised by Heritiera fomes, a species valued for its timber.

4. Gulf of Mannar Biosphere Reserve: The Gulf of Mannar Biosphere Reserve covers an area of 105,000 hectares on the south-east coast of India. It is one of the world's richest regions from a marine biodiversity perspective. The biosphere reserve comprises 21 islands with estuaries, beaches, forests of the nearshore environment, sea grasses, coral reefs, salt marshes and mangroves.

Question 6.

“Forest and tribal are very closely related”. Justify the statement.

Answer:

- To a vast number of tribal people, the forest, is a home, a livelihood, their very existence.
- It provides them food, fruits of all kinds, edible leaves, honey nourishing roots and wild game.
- It provides them with material to build their houses and items for practising their arts.
- The importance of forests in tribal economy is well-known as they are the source of sustenance and livelihood for tribal communities.
- The age old knowledge of tribals regarding forestry can be used in the development of forests.
- Rather than treating tribals as minor forest produce collectors they should be made growers of minor forest produce and encouraged to participate in conservation.

Question 7.

When was comprehensive Wildlife Act enacted and what are its objectives?

Answer:

In 1972, comprehensive Wildlife Act was enacted.

- To provide protection to the endangered species listed in the schedule of the act.
- To provide legal support to the conservation areas of the country classified as national parks, sanctuaries and closed areas.
- Making punishments more stringent and has also made provisions for the protection of specified plant species and conservation of endangered species of wild animals.

Question 8.

Write the objectives of Project Tiger and Project Elephant and in how many states they are implemented.

Answer:

The objectives of Project Tiger and Project Elephant are:

- Maintenance of viable population of tigers in India for scientific, aesthetic, cultural and ecological values.
- To preserve areas of biological importance as natural heritage for the benefit, education and enjoyment of the people.

The Project Tiger was launched in 1973 under which 27 tiger reserves have been set up in 17 states.

Project Elephant was launched in 1992. 14 elephant reserves have been set up during the year. Its main objective to ensure long-term survival of identified viable population of elephants in their natural habitat.

Question 9.

What is Biosphere Reserve and what are its objectives?

Answer:

Biosphere Reserve is a unique and representative ecosystem of terrestrial and coastal areas which are internationally recognized within the framework of UNESCO Man and Biosphere (MAB) programme.

The main objectives of biosphere reserve are:

- Conservation: Conservation of biodiversity and ecosystem.
- Development: Association of environment with development.
- Logistics: International network for research and monitoring.

Question 10.

Mangrove forests are unique in their own way. Explain.

Answer:

Mangrove forest:

- The tidal forests are found in the areas of the coastal margins of Krishna, Kaveri, and Brahmaputra delta mainly occupying the estuaries, etc.
- They are found in the swamp and marshy areas.
- They can survive both in fresh and salty water.
- The trees have stilt like breathing or support roots, sticking out of mud and water.
- They are exposed at low tides and get submerged at high tides.
- Hot and wet climate favours their dense growth.
- Sunderi is the well known Mangrove trees. The famous Sunderban deltas are named after these trees.