

Class 11 Geography NCERT Solutions Chapter 5 Natural Vegetation

Class 11 Geography Chapter 5 NCERT Textbook Questions Solved.

1. Choose the right answer from the four alternatives given below.

Question 1(i).

Sandalwood is an example of:

- (a) Evergreen forest
- (b) Deciduous forest
- (c) Deltaic forest
- (d) Thorny forest.

Answer:

- (b) Deciduous forests

Question 1(ii).

Which one of the following was the purpose of Project Tiger?

- (a) to kill tigers
- (b) to put tigers in the Zoo
- (c) to protect tigers from illegal hunting
- (d) to make films on tigers.

Answer:

- (c) To protect tigers from illegal hunting

Question 1(iii).

In which one of the following states is the Nandadevi Biosphere reserve situated?

- (a) Bihar
- (b) Uttar Pradesh
- (c) Uttarakhand
- (d) Odisha.

Answer:

- (c) Uttarakhand

Question 1(iv).

How many of the Biosphere reserves from India are recognised by the UNESCO?

- (a) One
- (b) Two
- (c) Three
- (d) Four.

Answer:

- (d) Four

Question 1(v).

Which one of the following proportion of area of the country was targeted to be under forest in Forest Policy of India? (a) 33

(b) 44

(c) 55

(d) 22.

Answer:

(a) 33.

2. Answer the following questions in about 30 words.

Question 2(i).

What is natural vegetation? Under what climatic conditions do tropical evergreen forests develop?

Answer:

Natural vegetation refers to a plant community that has been left undisturbed over a long time, so as to allow its individual species to adjust themselves to climate and soil conditions as fully as possible. India is a land of great variety of natural vegetation.

Tropical Evergreen forests are found in the western slope of the Western Ghats, hills of the north-eastern region and the Andaman and Nicobar Islands. They are found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22°C.

Question 2(ii).

What do you understand by social forestry?

Answer:

Social forestry means the management and protection of forests and afforestation on barren lands with the purpose of helping in the environmental, social and rural development.

The National Commission on Agriculture (1976) has classified social forestry into three categories. These are:

1. Urban forestry,
2. Rural forestry and
3. Farm forestry.

Question 2(iii).

Define Biosphere reserves?

Answer:

A Biosphere Reserve is a unique and representative ecosystem of terrestrial and coastal areas which are internationally recognised within the framework of UNESCO's Man and Biosphere (MAB) Programme. The Biosphere Reserve aims at achieving the three objectives:

- Conservation of biodiversity and ecosystem;
- Association of environment with development;

- Providing international network in research and monitoring.

Question 2(iv).

What is the difference between forest area and forest cover?

Answer:

Difference between forest area and forest cover:

- **Meaning:** 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.
- **Estimation:** The former is based on the records of the State Revenue Department, while the latter is based on aerial photographs and satellite imageries.
- **India facts:** According to state records, the forest area covers 23.28 per cent of the total land area of the country. According to India State of Forest Report 2011, the actual forest cover in India is only 21.05 per cent. !

3. Answer the following questions in not more than 150 words. j

Question 3(i).

What steps have been taken up to conserve forests? j

Answer:

Following steps have been taken up to conserve forests:

1. **Social forestry:** Social forestry means the management and protection of forest and afforestation on barren lands with the purpose of helping in the environmental, social and rural development. The National Commission on Agriculture (1976) has classified social forestry into three categories.

- **Urban forestry:** Urban forestry pertains to the raising and management of trees on public and privately owned lands in and around urban centres such as green belts, parks, roadside avenues, industrial and commercial green belts, etc.
- **Rural forestry:** Rural forestry lays emphasis on promotion of agro-forestry and community-forestry.
- **Farm forestry:** Agro-forestry is the raising of trees and agriculture crops on the same land inclusive of the waste patches. It combines forestry with agriculture, thus, altering the simultaneous production of food, fodder, fuel, timber and fruit.

2. **Community forestry:** Community forestry involves the raising of trees on public or community land such as the village pasture and temple land, roadside, canal bank, strips along railway lines, and schools, etc. Community forestry programme aims at providing benefits to the community as a whole.

3. **Farm forestry:** Farm forestry is a term applied to the process under which farmers grow trees for commercial and non-commercial purposes on their farm, lands. Forest departments of various states distribute seedlings of trees free of cost to small and medium farmers.

Question 3(ii).

How can people's participation be effective in conserving forests and wildlife?

Answer:

People's participation can be very effective in conserving forests and wildlife. It is the common people who harm the wildlife and forests the most. They cut trees for shifting cultivation. They kill animals for entertainment. Therefore in 1972, government of India has passed Wildlife Protection Act whereby it is illegal to do hunting. Since then the hunting and poaching cases have reduced to a great extent.

The two main objectives of the Act are; to provide protection to the endangered species listed in the schedule of the Act and to provide legal support to the conservation areas of the country classified as National parks, sanctuaries and closed areas. This Act has been comprehensively amended in 1991, making punishments more stringent and has also made provisions for the protection of specified plant species and conservation of endangered species of wild animals. There are 105 National parks and 514 wildlife sanctuaries covering an area of 15.67 million hectares in the country.

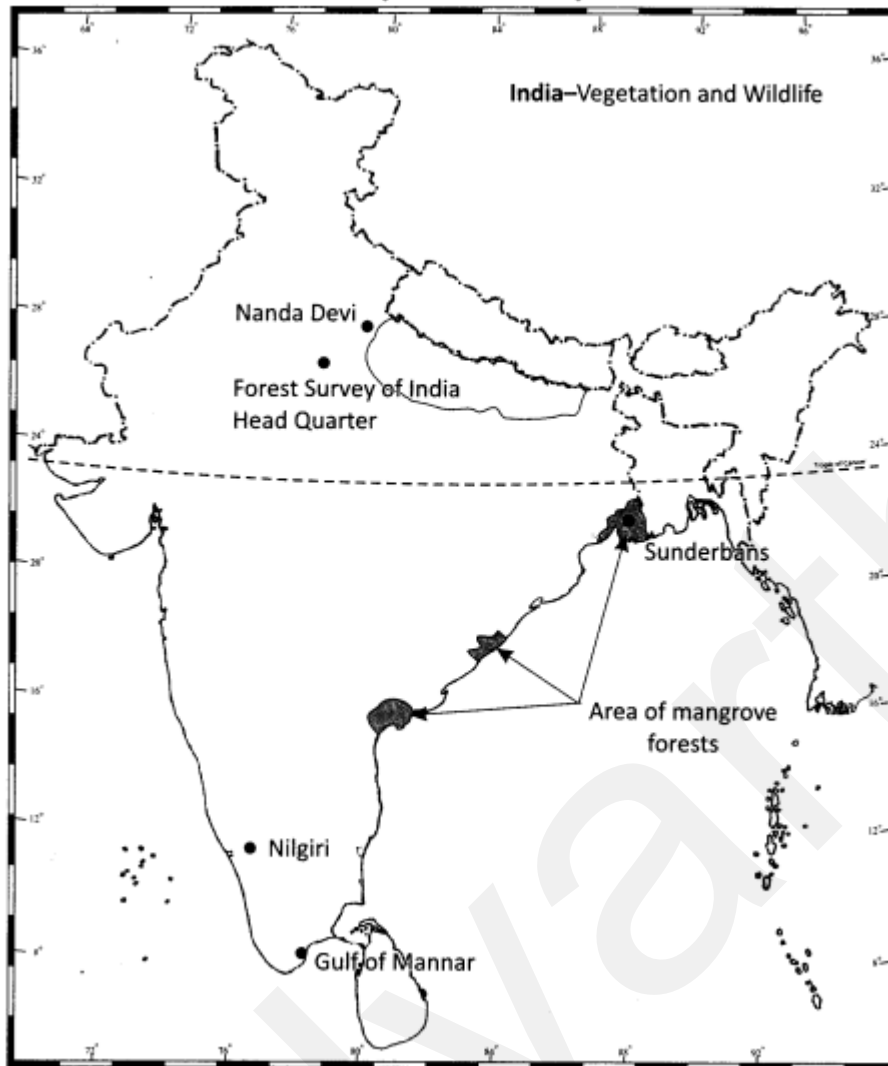
These actions are taken by the government but their implementation and maintenance depend on the participation and cooperation of the people.

Project/Activity

On an outline map of India, mark and label the following:

- (i) Areas having Mangrove forests.
- (ii) Biosphere reserves of Nanda Devi, Sunderbans, Gulf of Mannar and Nilgiri.
- (iii) Mark the location of Forest Survey of India Head Quarter.

Answer:



Class 11 Geography Chapter 5 NCERT Extra Questions

Class 11 Geography Chapter 5 Multiple Choice Questions

Question 1.

Those forests which shed their leaves before summer season:

- (a) Deciduous forests
- (b) Evergreen forests
- (c) Tidal forests
- (d) Thorny forests.

Answer:

- (a) Deciduous forests

Question 2.

Babool, her, and wild date palm, khair, neem are examples of:

- (a) Deciduous forests
- (b) Evergreen forests
- (c) Tidal forests
- (d) Thorny forests.

Answer:

- d) Thorny forests

Question 3.

Tidal and delta forests are found in which region of India?

- (a) Eastern Coast
- (b) Western Coast
- (c) Rann of Kachchh
- (d) Bay of Mannar.

Answer:

- (a) Eastern coast

Question 4.

Sunderbans or mangrove trees are found in:

- (a) Deciduous forests
- (b) Evergreen forests
- (c) Tidal forests
- (d) Thorny forests.

Answer:

- (c) Tidal forests

Question 5.

Which forests can develop in sweet as well as saline water?

- (a) Deciduous forests
- (b) Evergreen forests
- (c) Tidal forests
- (d) Thorny forests.

Answer:

- (c) Tidal forests

Question 6.

Where is Sunderbans biosphere reserve located?

- (a) In Ganga river delta
- (b) Orissa
- (c) Chhattisgarh
- (d) Madhya Pradesh.

Answer:

- (a) In Ganga river delta

Question 7.

What are important trees found in tropical evergreen forests?

- (a) Babool, her, and wild date palm
- (b) Teak, sal, shisham, hurra
- (c) Rosewood, mahogany, aini, ebony
- (d) Peepal, jamun, mahua.

Answer:

- (c) Rosewood, mahogany, aini, ebony

Question 8.

Tropical evergreen forests are found in those areas where:

- (a) 200 cm of rainfall takes place
- (b) 100 cm of rainfall takes place
- (c) 50 cm of rainfall takes place
- (d) Less than 50 cm of rainfall takes place.

Answer:

- (a) 200 cm of rainfall takes place

Question 9.

What is the basis of classifying important forms of natural vegetation?

- (a) Climate
- (b) Land
- (c) Topography
- (d) Atmospheric pressure.

Answer:

- (a) Climate

Question 10.

Which one of the following was first biosphere of India?

- (a) Nilgiri Biosphere
- (b) Nanda Devi Biosphere
- (c) Sunderbans Biosphere
- (d) Gulf of Mannar Biosphere.

Answer:

- (a) Nilgiri Biosphere

Question 11.

The National Commission on Agriculture (1976) has classified social forestry into three categories. Which of the following is not included in this?

- (a) Urban forestry
- (b) Rural forestry
- (c) Farm forestry
- (d) Agriculture forestry.

Answer:

- (d) Agriculture forestry

Question 12.

Which of the following is not included in urban forestry?

- (a) Green Belt
- (b) Park
- (c) Planting trees on roadsides
- (d) Planting trees on barren and arable lands.

Answer:

- (d) Planting trees on barren and arable lands

Question 13.

How many national parks and wildlife sanctuaries are there in India?

- (a) There are 105 national parks and 514 wildlife sanctuaries.
- (b) There are 112 national parks and 505 wildlife sanctuaries.
- (c) There are 12 national parks and 51 wildlife sanctuaries.
- (d) There are 78 national parks and 452 wildlife sanctuaries.

Answer:

- (a) There are 105 National parks and 514 wildlife sanctuaries.

Question 14.

Which type of trees are found in 3000-4000 altitude on Himalayas?

- (a) Bluepines Sproos
- (b) Deodar
- (c) Junior, Pine, Varch
- (d) Oak, Chestnut.

Answer:

- (c) Junior, Pine, Varch.

Class 11 Geography Chapter 5 Very Short Answer Type Questions

Question 1.

What is natural vegetation?

Answer:

Natural vegetation refers to a plant community that has been left undisturbed over a long time, so as to allow its individual species to adjust themselves to climate and soil conditions as fully as possible.

Question 2.

Where can you find natural vegetation?

Answer:

We can find natural vegetation in those areas where climate and soil are suitable for plant growth. Depending upon the variations in the climate and the soil, the vegetation of India changes from one region to another.

Question 3.

In how many categories have vegetation of Himalayas been classified?

Answer:

Vegetation of Himalayas has been classified into four groups. These are:

1. Deciduous forests
2. Wet temperate forests
3. Cold climate vegetation
4. Alpine vegetation.

Question 4.

When was National Forest Policy adopted in India?

Answer:

National Forest Policy was adopted in 1952 under which Forest Conservation Board was established. This policy was modified in 1988.

Question 5.

When was Project Tiger and Project Elephant launched?

Answer:

Project Tiger was launched in 1973 and Project Elephant was launched in 1992.

Question 6.

Name the states which have less than 10% of forest cover.

Answer:

States of India which have less than 10% forest cover: ‘

1. Haryana
2. Uttar Pradesh
3. Punjab
4. Rajasthan
5. Bihar
6. Delhi
7. Gujarat
8. Jammu and Kashmir.

Question 7.

Name those states which have more than two-third of area covered with forests. Answer:

States which have more than two third of area covered with forests:

1. Tripura
2. Nagaland
3. Mizoram
4. Meghalaya
5. Manipur
6. Arunachal Pradesh

Question 8.

Name important trees of tropical evergreen forests.

Answer:

Important trees of tropical evergreen forests include rosewood, mahogany, aini, ebony, etc.

Question 9.

Name important trees of tropical deciduous forests.

Answer:

Teak, sal, shisham, hurra, mahua, amla, semul, kusum, and sandalwood etc. are the main species of tropical deciduous forests.

Question 10.

Which state has highest and lowest percentage of forests?

Answer:

Mizoram has highest forests and Haryana has lowest forests.

Question 11.

Which union territory has highest and lowest percentage of forests?

Answer:

Lakshadweep islands and Andaman and Nicobar has largest number of trees with 85.91% and 84.01% respectively. Pondicherry and Chandigarh have lowest percentage of forest cover with 7.45% and 7.51% respectively.

Question 12.

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:

1. The region of high concentration > 40
2. The region of medium concentration 20-40
3. The region of low concentration 10-20
4. The region of very low concentration < 10.

Question 13.

What is a national park?

Answer:

A national park is an area which is strictly reserved for the protection of the wildlife and where activities such as forestry, grazing or cultivation are not allowed.

Question 14.

What is social forestry?

Answer: Social forestry means the management and protection of forests and afforestation on barren lands with the purpose of helping in the environmental, social and rural development.

Question 15.

Why vegetation in thorn forest have sukleen stem and small leaves?

Answer:

Vegetation in thorn forest have sukleen stem and small leaves because this forest lies in the areas which receives rainfall less than 50 cm.

Question 16.

Name the first Biosphere reserve?

Answer:

The Nilgiri Biosphere Reserves was the first of the fourteen biosphere reserve of India.

Question 17.

When was the new forest policy implemented?

Answer:

The new forest policy was adopted in 1952 and was further modified in 1988.

Class 11 Geography Chapter 5 Short Answer Type Questions

Question 1.

Explain the three categories of social forestry?

Answer:

Social forestry is classified into three categories Urban forestry:

It pertains to the raising and management of trees on public and privately owned land such as green belts, parts, roadside avenues, industrial and commercial green belts etc.

Rural forestry:

- It is divided into agro-forestry and community.
- Agro-forestry is the raising of trees and agriculture crops on the same land inclusive of the waste patches.
- Community forestry involves the raising of trees on public or community land such as the village pasture and temple land, roadside, canal bank, strips, along railway lines and schools, etc. providing benefits to the community as a whole.

Farm forestry:

- It is a term applied to the process under which farmers grow trees for commercial and non-commercial purposes on their farm lands.
- Commercial purposes-Forest department of various states distribute seedlings of trees free of cost to small and medium farmers. Several land such as the margins of agricultural fields grasslands and pastures, land around homes and cow sheds may be used for raising trees under non-commercial farm forestry.

Question 2.

The percent of forest cover varies state to state. Substantiate.

Answer:

According to state records, the forest area covers 23.28 per cent of the total land area of the country. According to India State of Forest Report 2011, the actual forest cover in India is only 21.05 per cent. Both forest area and forest cover vary from state to state.

- Lakshadweep has zero per cent open forest area; Andaman and Nicobar Islands have 86.93 per cent.
- Most of the states with less than 10 per cent of the forest area lie in the north and north-western part of the country. These are Rajasthan, Haryana and Delhi.
- States with 10-20 per cent forest area are Tamil Nadu and West Bengal.
- In Peninsular India, excepting Tamil Nadu, Dadra and Nagar Haveli and Diu, the area under forest cover is 20-30 per cent.
- The north-eastern states have more than 30 per cent of the land under forest. Hilly topography and high rainfall are good for forest growth.
- There are 15 states where the forest cover is more than one-third of the total area, which is the basic requirement for maintaining the ecological balance.

Question 3.

What objectives have been determined for the conservation of forests according to national forest policy?

Answer:

Objectives of new forest policy are:

- Bringing 33% of the geographical areas under forest cover.
- Maintaining environmental stability and to restore forests where ecological balance was disturbed.
- Conserving the natural heritage of the country.
- Its biological diversity and genetic pool.
- Checks soil erosion extension of the deserts land and reduction of floods and droughts.
- Increasing the forest cover through social forestry and afforestation on degraded lands.
- Increasing the productivity of forest to make timber, fuel, fodder and food available to rural population dependent on forests and encourage the substitution of wood.
- Creating massive people's movement involving women to encourage planting of trees, stop felling of trees and thus, reduce pressure on the existing forest.

Question 4.

Write down the important features of thorn forest?

Answer:

- Tropical thorn forest occurs in the areas which receive rainfall less than 50 cm and consist of variety of grasses and shrubs.
- It includes semi-arid areas of south-west Punjab, Haryana, Maharashtra, Madhya Pradesh and Uttar Pradesh.
- In these forests, plants remain leafless for most part of the year and give an expression of scrub vegetation.
- Important species found are babool, khair, neem, kherjiri, palas, etc.
- Tussocky grass grows upto a height of 2m as the under growth and cactus is an important plant of these forests.
- Its main features are that they have sukleen stems which help in retaining moisture.
- They have roots which go underground upto 1 km.
- Leaves are reduced into thorn, spines which reduce transpiration.

Question 5.

Explain about mountain forests.

Answer:

The Himalayan ranges show a succession of vegetation from the tropical to the tundra, which change in with the altitude.

Mountain forests can be classified into two types, the northern mountain forests and the southern mountain forests. 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 northeastern India, hilly areas of West Bengal and Uttaranchal, 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. Deodar, a highly valued endemic species grows mainly in the western part of the Himalayan range. Blue pine and spruce appear at altitudes of 2,225-3,048 m. At many places in this zone, temperate grasslands are also found. But in the higher reaches there is a transition to Alpine forests and pastures. Silver firs, junipers, pines, birch and rhododendrons, etc. occur between 3,000-4,000 m.

Question 6.

In how many groups has wetland been divided in our country?

Answer:

The country's wetlands have been grouped into eight categories. These are:

- The reservoirs of the Deccan Plateau in the south together with the lagoons and other wetlands of the southern west coast;
- The vast saline expanses of Rajasthan, Gujarat and the Gulf of Kachchh;
- Freshwater lakes and reservoirs from Gujarat eastwards through Rajasthan and Madhya Pradesh;
- The delta wetlands and lagoons of India's east coast;
- The freshwater marshes of the Gangetic Plain;
- The floodplains of the Brahmaputra; the marshes and swamps in the hills of northeast India and the Himalayan foothills;
- The lakes and rivers of the montane region of Kashmir and Ladakh; and
- The mangrove forest and other wetlands of the island arcs of the Andaman and Nicobar Islands.

Question 7.

Differentiate between:

1. Natural Vegetation and Forests
2. Dry deciduous and Moist deciduous Forest
3. Forest cover and Forest area
4. National Park and Sanctuary
5. National Park and Biosphere Reserve.

Answer:

1.

Basis	Natural Vegetation	Forests
Meaning	Natural vegetation refers to a plant community that has been left undisturbed over a long time, so as to allow its individual species to adjust themselves to climate and soil conditions as fully as possible.	Group and community of plants and trees which are found in a particular climatic conditions are called forests.
Collection	These may not be similar.	These are generally similar.

Scope	These include forests.	Forests are a type of natural vegetation.
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2.

Basis	Dry Deciduous Forest	Moist Deciduous Forest
Rainfall	It's rainfall ranges between 70-100 cm.	It's rainfall ranges between 100-200 cm.
Areas	These forests are found in the rain areas of the peninsular and the plains of the Uttar Pradesh and Bihar.	These forests are found in the northern-eastern states along the foothills of Himalayas, eastern slopes of the western Ghats and Orissa.
Species	Main species: Tendu, palas, khair, axlewood, etc.	Main species: Teak, sal, shisham, kusum and sandalwood, etc.

3.

Basis	Forest Cover	Forest Area
Meaning	The forest cover is the area occupied by forests with canopy.	The forest area is the area notified and recorded as the forest land irrespective of the existence of land.
Findings	It is based on aerial photographs and satellite imageries.	It is based on the records of the state revenue department.
Coverage	The actual forest cover was only 20.55 %	The forest cover area is 23.28 % of the total area of the country.
Example	Actual forest cover ranges from 9.56 % and in Jammu and Kashmir to 84.01 % in Andaman and Nicobar Island.	Lakshadweep has zero percent forest area Andaman and Nicobar Islands have 86.93% etc.

4.

Meaning	A national park is an area which is strictly reserved for the protection of the wildlife and where activities such as forestry, grazing or cultivation are not allowed.	A sanctuary is an area which is reserved for the conservation of animals only and operations such as harvesting of timber, collection of minor forest products are allowed so long as they do not affect the animals adversely.
Number	There are 105 national parks in India.	There are 514 wildlife sanctuaries in India.

Example	Actual forest cover ranges from 9.56% and in Jammu and Kashmir to 84.01% in Andaman and Nicobar Island.	Lakshadweep has zero percent forest area; Andaman and Nicobar Island have 86.93% etc.
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5.

Basis	National Park	Biosphere Reserve
Meaning	A national park is an area which is strictly reserved for the protection of the wildlife and where activities such as forestry, grazing or cultivation are not allowed.	A biosphere reserve is a unique and representative ecosystem of terrestrial and coastal areas which are internationally recognised within the framework of UNESCO's Man and Biosphere (MAE) Programme.
Number	There are 105 national parks in India.	There are 18 biosphere reserves in India.

Class 11 Geography Chapter 5 Long Answer Type Questions

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.

Class 11 Geography Chapter 5 Hots Questions

Question 1.

“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 2.

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 3.

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 4.

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 5.

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.

MAP SKILL

Question 1.

On an outline map of India, mark and label the following:

1. Nanda devi
2. Panchmarhi
3. Manas
4. Nilgiri
5. Similipal

6. Bay of Mannar
7. Great Nicobar
8. Nokrak
9. Sunderbans
10. Achanakmar – Amarkantak.

Answer:

