

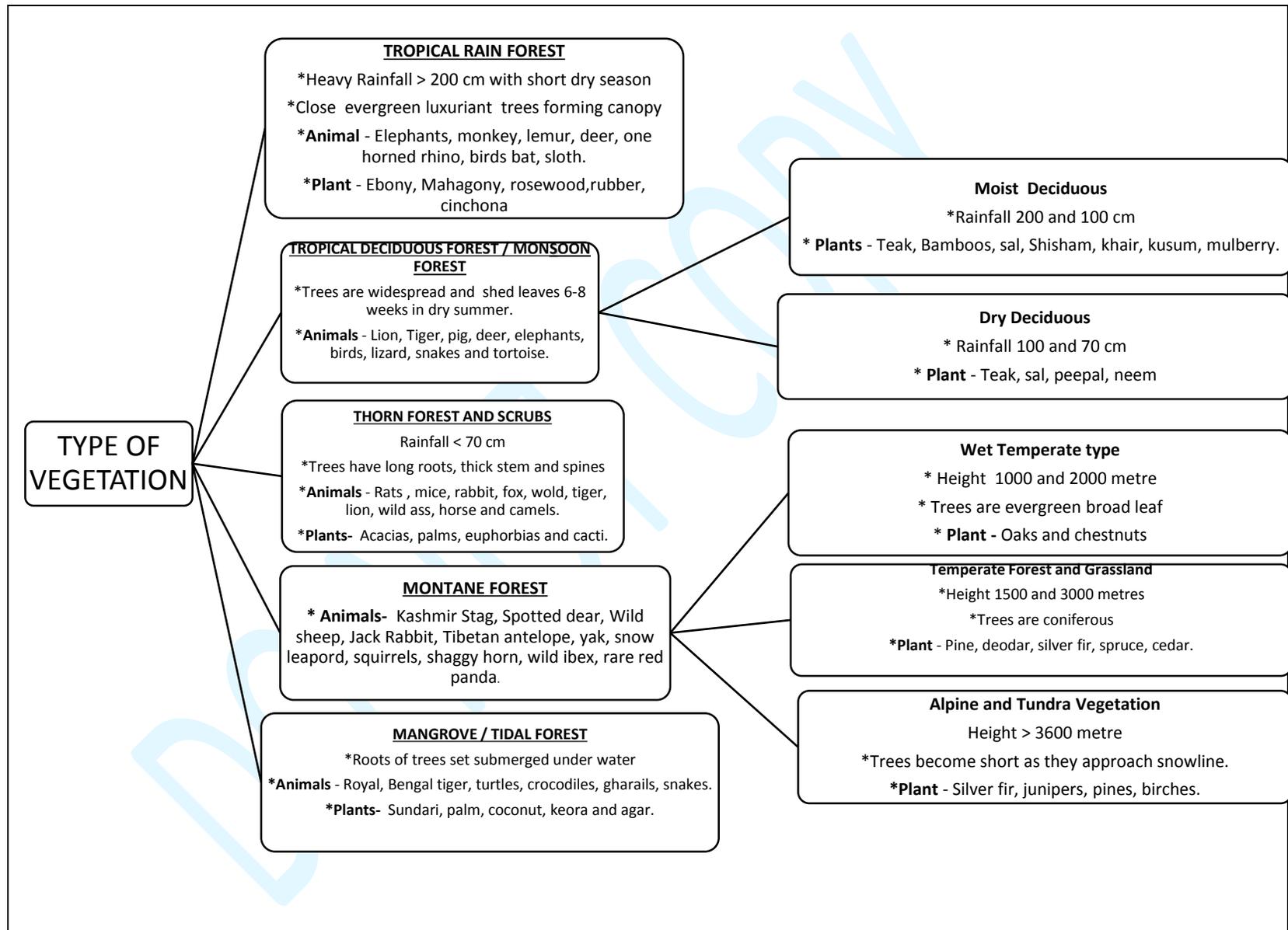
## NATURAL VEGETATION AND WILDLIFE

<b>Q.1. Find out why are the southern slopes in Himalayan region covered with thick vegetation cover as compared to northern slopes of the same hills.</b>		
<b>Description</b>		
<b>northern altitude, water, temperature</b>	1. The northern parts are at <b>high altitude</b>	
	2. and have <b>low temperature</b>	
	3. or are <b>snow covered</b>	
	This does not allow much vegetation	
<b>Southern altitude, water, temperature</b>	In the southern part of the hills	
	1. there are <b>plains and valleys</b>	
	2. <b>watered by rivers and with fertile soil</b> and <b>pleasant temperature</b> levels	
	3. all required for dense growth of vegetation.	
<b>2. Find out why have the western slopes of the Western Ghats covered with thick forests and not the eastern slopes.</b>		
<b>Rain</b>	The westward facing slopes	
	1. <b>receive much more rain</b> than the eastward facing slopes and	
	2. <b>the Western Ghats are considerably wetter</b> than the dry Deccan to the east.	
<b>Q.3. Distinguish between: (i) Flora and Fauna (ii) Tropical Evergreen and Deciduous Forests</b>		
	<b>Fauna</b>	<b>Flora</b>
<b>Species Region</b>	Fauna refers to <b>species of animals</b> found in an <b>region</b> .	Flora denotes <b>plants</b> of a particular <b>region</b> .
	<b>Tropical evergreen forests</b>	<b>Deciduous forests</b>
<b>1. Rainfall</b>	1. Tropical evergreen forests abound in areas with rainfall <b>exceeding 200 cm</b> in a year.	1. Deciduous forests are spread over the region where the rainfall ranges between <b>70-200 cm annually</b> .

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2. <b>Trees close or far</b>	2. As the trees <b>grow very close</b> to each other they form a <b>thick canopy</b> .	2. The trees have <b>widespread out branches</b> like the neem and mango.
3. <b>Trees height</b>	3. Trees reach heights up to <b>60 m</b> in these forests.	3. The trees also have <b>less height</b> than evergreen trees.
4. <b>Luxuriant</b>	4. The vegetation is luxuriant.	4. These forests are <b>more open and less luxuriant</b> and trees are <b>more spread out</b> .
5. <b>Shedding</b>	5. There is <b>no definite time</b> for the trees to shed leaves.	5. In dry summer, the trees shed their leaves for <b>six to eight weeks</b> .
6. <b>Species</b>	6. A large number of species exist together in such forests. Important trees are <b>Ebony, Mahogany, Rosewood, Rubber and Cinchona</b> .	7. On the basis of availability of water, deciduous forests are divided into <b>moist deciduous</b> , e.g. teak, <b>Sal, Shisham, Sandalwood,</b> and <b>dry deciduous</b> , e.g. <b>Sal, Peepal, Neem, Palas.</b>
<p><b>Q.4. Name different types of vegetation found in India and DESCRIBE THE VEGETATION OF HIGH ALTITUDES.</b>  <b>OR . Q.16. Name the vegetation found at high altitude in our country and mention animals are found in this region. [2011 (T-2)]</b></p>		

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<ol style="list-style-type: none"> <li>1. <b>Types of Vegetation</b></li>   <li>2. <b>Height</b></li> <li>3. <b>Stunted</b></li> <li>4. <b>Scrubs and scrubs</b></li> <li>5. <b>Tundra</b></li> <li>6. <b>Trees</b></li> <li>7. <b>Animals</b></li> </ol>	<ol style="list-style-type: none"> <li>1. The different types of vegetation found in India are: Tropical rainforests, Tropical Deciduous forests (or the Monsoon Forest) , Thorn forests, Montane Forest which comprises of Temperate forests (Wet and Dry) and Alpine and Tundra Forest and Mangrove/Tidal vegetation.</li>   <li>2. Alpine vegetation is found at places over <b>3,600 m in height</b>.</li> <li>3. The trees get <b>stunted</b> as they reach <b>the snow line</b>.</li> <li>4. There are <b>shrubs and scrubs</b> that ultimately <b>merge into Alpine grasslands</b>.</li>   <li>5. <b>Tundra</b> vegetation is limited to <b>lichens and mosses</b>.</li> <li>6. The trees common to these are <b>silver fir, junipers, pines and birches</b>.</li> <li>7. The common <b>animals</b> found in these forests are Kashmir stag, spotted deer, wild sheep, Jack rabbit, Tibetan antelope, yak, snow leopard, squirrels, shaggyhorn, wild ibex, bear and rare red panda, sheep and goats with thick hair.</li> </ol>
<p><b>Q.5. Quite a few species of plants and animals are endangered. Why?</b></p>	
<ol style="list-style-type: none"> <li>1. <b>More lands are being cleared</b></li> <li>2. <b>Pollution</b></li> <li>3. <b>hunting and poaching</b></li> <li>4. <b>excessive commercialization of plants</b></li> </ol>	<p>The main reason for extinction of</p> <ol style="list-style-type: none"> <li>1. Plant species are endangered as <b>more lands are being cleared for factories</b>, housing colonies and roads thus <b>reduced space for animal habitats</b>.</li> <li>2. <b>Pollution</b> of air, water and soil adds to the danger to natural vegetation.</li> <li>3. Animal species are getting extinct due to <b>hunting and poaching</b>.</li> <li>4. Certain species of plants is <b>excessive commercialization</b>.</li> </ol>
<p><b>Q.6. Why has India a rich heritage of flora and fauna? (CBSE 2010) – SHORT ANSWER</b></p>	
	<p>Ans.</p> <ol style="list-style-type: none"> <li>1. India has a rich heritage of fauna and flora as geographically the country has a very wide range of physical, climatic and soil conditions.</li> </ol>

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	2. Our tradition of respecting all forms of life has also contributed to the preservation of plant and animal species over the centuries.
<b>C. SHORT ANSWER TYPE QUESTIONS (3 MARKS)</b>	
<b>Q.1. Give a brief description of tropical evergreen forests.</b>	
<ol style="list-style-type: none"> <li>1. Rainfall over 200 cm</li> <li>2. Do not shed leaves</li> <li>3. Warm and wet climate, luxuriant vegetation, broad-leafed trees</li> <li>4. Tall tree close to each other - canopy</li> <li>5. Example of trees EMRRC</li> </ol>	<p>Ans.</p> <ol style="list-style-type: none"> <li>1. Tropical evergreen forests are also known as rainforests are found in areas receiving heavy <b>rainfall of over 200 cm, well distributed throughout the year.</b></li> <li>2. These trees <b>do not shed their leaves</b> at the same time as there is no distinct dry season. This makes the forests <b>evergreen</b> as they retain their green look throughout the year</li> <li>3. The <b>warm, wet climate</b> throughout the year supports <b>luxuriant vegetation</b> of all kinds including trees, shrubs and creepers and large number of <b>broad-leafed trees</b> of different species.</li> <li>4. The trees grow very tall, reaching a height of <b>60 metres</b>. As the trees grow <b>very close to each other</b> they form a <b>thick canopy</b>.</li> <li>5. Ebony, mahogany, rosewood, rubber, cinchona are commercially important trees.</li> </ol>
<b>Q.2. What are the characteristics of the trees of deciduous forests? (CBSE 2010)</b>	
<ol style="list-style-type: none"> <li>1. Rainfall of 70 to 200 cm</li> <li>2. Shed their leaves for</li> <li>3. Widespread out branches, Leaves smaller</li> </ol>	<p>Ans.</p> <ol style="list-style-type: none"> <li>1. Deciduous forests also known as Monsoon Forests are found in areas receiving <b>rainfall of 70 to 200 cm</b> with a distinct dry season.</li> <li>2. They are Trees of this forest type <b>shed their leaves for about six to eight weeks</b> in dry summer. So they have a distinct period for shedding their leaves.</li> <li>3. The trees have <b>widespread out branches</b> like the neem and mango and have <b>less height</b> than evergreen trees. Leaves are <b>smaller in size</b> than that of the rain forests to reduce transpiration.</li> <li>4. These forests are <b>more open and less luxuriant</b>.</li> </ol>

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<p>and trees less height</p> <p>4. More open and less luxuriant.</p> <p>5. Example</p>	<p>5. The trees are prized for their hardwood <b>commercially valuable timber</b> is collected from these forests on the basis of availability of water, deciduous forests are divided into moist deciduous, e.g. teak, sal, shisham, sandalwood, and dry deciduous, e.g. sal, peepal, neem, palas..</p>
<p><b>Q3. Write a short note on the flora and fauna of India. OR Why has India a rich heritage of flora and fauna ? (CBSE 2010)</b></p> <p>Or</p> <p><b>Q.14. Explain the different biodiversity of India. [2011 (T-2)]</b></p>	
<p>1. Term</p> <p>2. <b>47,000 plant species – 10<sup>th</sup> place world- 4<sup>th</sup> place Asia</b></p> <p>3. <b>15,000 flowering plants endemic or indigenous - 6 per cent of world's flowering plants</b></p> <p>4. nonflowering plants</p> <p>5. climatic regions ranging from tropical to Tundra</p> <p>6. <b>89,000 species of animals and 1200 species of birds. 13 percent of the</b></p>	<p>Ans.</p> <ol style="list-style-type: none"> <li>The <b>term</b> flora is used to denote plants and the term fauna is used to denote animal species of a particular region or period.</li> <li>With about <b>47,000 plant species</b>, India occupies <b>tenth place in the world</b> and <b>fourth in Asia</b> in plant diversity.</li> <li><b>15,000 flowering plants</b> are endemic or indigenous to India. They account for <b>6 per cent of world's total number</b> of flowering plants.</li> <li>A large number of <b>nonflowering plants</b> like ferns, algae and fungi are also found in India.</li> <li>Plants of <b>all climatic regions ranging from tropical to Tundra</b> are found in India.</li> <li>It has more than <b>89,000 species of animals and 1200 species of birds. 13 percent of the world's total number of birds</b> are found in India.</li> <li><b>5 to 8 percent of the world's amphibians</b> are found in India.</li> <li>It has <b>2500 species of fishes</b> in its marine and freshwaters. This accounts for nearly <b>12 percent of the world's stock.</b></li> <li>India is the only country in the world which has <b>both lions and tigers.</b></li> </ol>

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<p>world's total number of birds</p> <p>7. 5 to 8 percent of the world's amphibians</p> <p>8. 2500 species of fishes 12 percent of the world's stock</p> <p>9. both lions and tigers</p>		
<b>Q4. . Distinguish between extinct and endangered species.</b>		
	<b>Extinct</b>	<b>Endangered</b>
<b>Definition</b> -No more surviving - danger of extinction.	1. Extinct species are those species of flora and fauna which are no more surviving. Even after searches of known or likely areas where they may occur, they are <b>no more found.</b>	1. Endangered species are those species of flora or fauna which are in the danger of extinction. They have <b>declined in number at an alarming rate.</b>
<b>May be extinct</b> - negative factors needs to be -removed for their survival.	2. A species may be extinct from <b>an area, region, country, continent or the entire earth.</b>	2. If the negative factors that have <b>reduced their number is not checked, their survival is difficult.</b>
<b>India</b> <b>World</b>	3. <b>Asiatic cheetah and pink-head duck</b> are extinct in India. <b>Dodo and dinosaurs</b> are extinct from the entire earth.	3. <b>Black buck, Indian rhino, Indian wild ass, Sangai and Indian tiger</b> are endangered species in India. <b>Black Panda</b> is an endangered species throughout the world.
<b>Q.5. Give a brief description of temperate forests. Or Distinguish between Wet Temperate Type Forest and Temperate Forest and Grassland</b>		
	Ans.	

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<ol style="list-style-type: none"> <li>1. <b>Climate</b></li> <li>2. <b>Mountainous regions</b></li> <li>3. <b>WET TEMPERATE: -1000 and 2000 evergreen - broad-leafed hardwood trees</b></li> <li>4. <b>TEMPERATE FOREST AND GRASSLAND -1500 and 3000 meters. -Trees are tall, straight and conical in shape</b></li> <li>5. <b>Example</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Temperate forests are found in areas with <b>cool climate</b>. Here, a <b>rise in altitude corresponds with a fall in temperature</b> and supports the growth of temperate forests.</li> <li>2. In India, temperate forests are found in the <b>MONTANE FOREST REGION</b> of the north.</li> <li>3. The <b>WET TEMPERATE TYPE</b> of forests are found in areas with <b>elevation between 1000 and 2000 meters</b> rainfall is high in these areas. So, <b>evergreen broad-leafed hardwood trees</b> predominate these areas. Oak and chestnut are important species of these temperate forests.</li> <li>4. <b>TEMPERATE FOREST AND GRASSLAND</b> are at elevations between <b>1500 and 3000 meters, temperate forests containing coniferous trees</b> are found mostly the <b>southern slopes of the Himalayas and places having high altitude</b> in northeast India. The <b>trees</b> of these forests are <b>tall, straight and conical in shape</b>. The <b>leaves are narrow and needle shaped and seeds are found in hard cones</b>.</li> <li>5. Pine, deodar, silver fir, spruce and cedar are important trees found in these forests.</li> </ol>
<p><b>Q. 6 Discuss the type of vegetation found in a thorn forest. OR Describe any three features of thorn forests. (CBSE 2010)</b></p>	
<ol style="list-style-type: none"> <li>1. <b>Rainfall</b></li> <li>2. <b>Region</b></li> <li>3. <b>Open forest – thorny tree with grasses in between</b></li> <li>4. <b>Tree and roots</b></li> <li>5. <b>Leaves and stem</b></li> <li>6. <b>Example</b></li> </ol>	<p>Ans.</p> <ol style="list-style-type: none"> <li>1. Thorn forests are found in regions with less than 70 cm of rainfall.</li> <li>2. This type of vegetation is found in northwestern India, in the desert and semi-arid areas.</li> <li>3. The vegetation consists of low and open forests with short thorny trees and thorny bushes, scrubs and grasses in between.</li> <li>4. Trees are scattered and have long roots, penetrating deep into the soil to tap groundwater.</li> <li>5. The leaves are thick and small to reduce evaporation and are often transformed into spines and thorns to minimise evaporation. The cacti growing in the deserts have thick succulent stems to conserve water.</li> <li>6. Acacias, palms, euphorbias, khair, babul and cacti are the main plant species of the thorn forests</li> </ol>

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<p><b>Q.7. What are dry deciduous forests? How do they differ from moist deciduous forests? OR Write three main characteristics of tropical deciduous forest ? (CBSE 2010)</b></p> <p><b>OR</b></p> <p><b>Q.15. Name the two sub-type of Tropical deciduous forests. State any two features of each type also.</b></p>		
<p><b>Monsoon forest type</b></p>	<p>The tropical deciduous or monsoon forests are sub-divided into dry deciduous and moist deciduous forests. These divisions are made on the basis of the availability of water.</p>	
	<p><b>DRY DECIDUOUS FORESTS</b></p>	<p><b>MOIST DECIDUOUS FORESTS</b></p>
<p><b>1. Rainfall</b></p>	<p>1. The <b>DRY DECIDUOUS FORESTS</b> are found in areas receiving rainfall between <b>100 cm and 70 cm</b>.</p>	<p>1. In contrast, the <b>MOIST DECIDUOUS FORESTS</b> are found in areas receiving rainfall between <b>200 cm and 100 cm</b>.</p>
<p><b>2. Characteristics</b></p>	<p>2. The principal characteristics of dry deciduous forests are :</p>	<p>2. The main characteristics of vegetation are</p>
<p><b>a) Quality of trees</b></p>	<p>(a) Trees are <b>not as good nor large in quantity</b> .</p>	<p>(a) Trees are <b>good and large in quantity</b> .</p>
<p><b>b) Shed leaves and cover</b></p>	<p>(b) These forest <b>shed their leaves</b> during early spring or summer when sufficient moisture is not available. Therefore dry deciduous <b>forests are bare. (WITHOUT LEAVES) for a longer period.</b></p>	<p>(b) They do shed leaves but all the <b>trees are evergreen</b> and bare leaves for longer period as <b>do not shed their leaves all at a time.</b></p>
<p><b>c) Forest appears :</b> Open-bare-brown Close-thick-green</p>	<p>(c) The forest is <b>more open</b> and appears bare and <b>brown</b> during summer.</p>	<p>(c) Therefore, the forest will remain <b>green</b> all the year round. <b>Thick cover</b> of forest, characterized by climbers and epiphytes.</p>
<p><b>d) Example</b></p>	<p>(d) Examples - Teak, sal, peepal, neem, palas are important trees of these forests.</p>	<p>(d) Example - Teak, Fern, Bamboos, sal, Shisham, khair, kusum, mulberry are important trees of these forests.</p>
<p><b>Q.9. Describe the main objectives of the Project Tiger and the Project Rhino and their effect on the wildlife in India. (Important)</b></p>		
<p><b>1. Name</b></p> <p><b>2. Purpose</b></p> <p><b>3. Objective</b> <b>(i) Protect - from</b></p>	<p>Ans.</p> <p>1. <b>The Project Tiger and Project Rhino</b> are two well known wildlife conservation projects.</p> <p>2. They have been undertaken <b>to protect</b> the Indian tiger and the one-horned rhino of India which are <b>endangered species.</b></p> <p>3. Their objectives are as follows :</p> <p><b>(i) Protect the endangered species from poaching, hunting and illegal trading.</b></p>	

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<p>(ii) Save habitat-why (iii) Maintain a survey – why</p> <p>4. Role – in</p> <p>5. Steps – in - by</p>	<p>(ii) Save the <b>natural habitats</b> of these animals so that they can <b>breed naturally and multiply in numbers.</b></p> <p>(iii) Maintain a survey of the number of existing tigers and rhinos to take informed decision.</p> <p>4. These well publicized projects have played a great <b>role</b> in <b>protecting the endangered animals.</b></p> <p>5. Under the projects government has undertaken <b>steps</b> to <b>save and protect</b> the existing animals by <b>banning hunting and poaching.</b></p>
<p><b>Q.10. What is an ecosystem ? How do the human beings influence the ecology of a region ? (CBSE 2010)</b></p>	
<p>1. Distinct groups of communities - having</p> <p>2. ECOSYSTEM - Interdependent and interrelated – Physical environment</p> <p>3. Human beings integral</p> <p>4. Utilize</p> <p>5. Greed</p> <p>6. How - Ecological imbalance</p>	<p>Ans.</p> <p>1. All the plants and animals occur in <b>distinct groups of communities</b> in areas <b>having similar climatic conditions.</b></p> <p>2. All the plants and animals in an area are <b>interdependent and interrelated</b> to each <b>other in their physical environment</b> called the ecosystem.</p> <p>3. <b>Human beings</b> are an <b>integral part</b> of the ecosystem.</p> <p>4. They <b>utilize</b> the <b>vegetation and wildlife.</b></p> <p>5. The <b>greed</b> of human beings leads to over <b>utilization of these resources.</b></p> <p>6. They <b>cut the trees and kill animals</b> creating an <b>ecological imbalance.</b></p>
<p><b>Q.11. Describe the kind of vegetation and wildlife found in the Ganga-Brahmaputra delta. (CBSE 2010)</b></p>	
<p>1. Region</p> <p>2. Example of plants</p> <p>3. Example of animals</p>	<p>Ans.</p> <p>1. The Ganga-Brahmaputra delta is covered by <b>mangrove /tidal forest</b>, mainly <b>Sundari trees</b> which provide <b>durable hard timber.</b></p> <p>2. Palm, coconut, keora, agar also grow in some parts of the delta.</p> <p>3. Royal Bengal tiger is the famous animal found here. Turtles, crocodiles, gharials and snakes are also found in these forests.</p>

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<b>Q.12. What are the steps taken by the Government to protect flora and fauna in India? Write any three. [2011 (T-2)]</b>	
<p><b>1. Setting biosphere reserves</b></p> <p><b>2. Ecodevelopment Projects</b></p> <p><b>3. Setting up - National Parks, wildlife sanctuaries and zoological gardens</b></p>	<p>Ans. To protect the flora and fauna of the country, the government of India has taken many steps, as stated below : (i) <b>Fourteen biosphere reserves</b> have been set up in the country at different places to protect flora and fauna. Out of these <b>four have been included in the world network</b> of biosphere reserves.</p> <p>(ii)</p> <ul style="list-style-type: none"> <li>• <b>Project tiger,</b></li> <li>• <b>Project Rhino,</b></li> <li>• <b>Project Great Indian Bustard</b> and</li> <li>• And many other ecodevelopmental projects have been introduced.</li> </ul> <p>(iii)</p> <ul style="list-style-type: none"> <li>• 89 National parks,</li> <li>• 49 wildlife sanctuaries and</li> <li>• zoological gardens are set up to take care of our natural heritage.</li> </ul>
<b>Q.13. In which region are the thorny forests and scrubs found in India? Mention any two characteristics of such type of vegetation? [2011 (T-2)]</b>	
<p><b>1. Rainfall</b></p> <p><b>2. Region</b></p> <p><b>3. Plant</b></p> <p><b>4. Characteristics</b></p>	<p>Ans.</p> <ol style="list-style-type: none"> <li><b>1.</b> The thorny forests and scrubs in India are found in regions with less than <b>70 cm of rainfall.</b></li> <li><b>2.</b> This type of vegetation is found in the <b>North-Western part of the country</b> including semi-arid areas of Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Uttar Pradesh and Haryana.</li> <li><b>3.</b> Acacias, palms euphorbias and cacti are the main <b>plant species.</b></li> <li><b>4.</b> The three important characteristics of such type of vegetation are as follows :             <ol style="list-style-type: none"> <li>(i) <b>Trees are scattered and have long roots</b> penetrating deep into the soil (WHY???) in order to get moisture.</li> <li>(ii) The stems of the trees are <b>succulent</b> (WHY???) to conserve water.</li> <li>(iii) Leaves are mostly <b>thick and small</b> (WHY???) to minimize transpiration.</li> </ol> </li> </ol>
<b>Q.17. How are forests useful to us? Give Examples. [2011 (T-2)] OR How are forests important for human beings? Explain</b>	

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<ol style="list-style-type: none"> <li>1. Provides</li> <li>2. Raw Material</li> <li>3. Renewable resources</li> <li>4. Environment</li> <li>5. Livelihood</li> <li>6. Home to animals and recreation to man.</li> </ol>	<ol style="list-style-type: none"> <li>1. Forests provide to man <b>food, fibre, fodder, timber, fuel wood and hosts</b> of other essential items.</li> <li>2. It provides <b>raw</b> materials to <b>industry and transport</b>.</li> <li>3. Forest is a <b>renewable resource</b> and is widely used as <b>domestic fuel</b> in Third World countries.</li> <li>4. Forest also influences the environment by modifying <b>local climate, controlling soil erosion and deposits humus in the soil, regulating stream flows</b>.</li> <li>5. Minor forest products provide <b>livelihood to many forest dwellers</b>.</li> <li>6. Besides, forest is the <b>home</b> of various wild animals and birds. It offers <b>recreation to man</b> and boosts the Tourism industry.</li> </ol>
<p><b>Q.18. What do you mean by natural vegetation? What is their importance? [2011 (T-2)]</b></p>	
<ol style="list-style-type: none"> <li>1. What is natural vegetation? Plant community – grown naturally - undisturbed</li> <li>2. Cultivated crops</li> <li>3. Importance <ul style="list-style-type: none"> <li>• modify local climate,</li> <li>• soil erosion,</li> <li>• stream flow,</li> <li>• support industries, provide livelihood panoramic view</li> </ul> </li> <li>4. What is provides</li> </ol>	<p>Ans.</p> <ol style="list-style-type: none"> <li>1. Natural vegetation refers to a <b>plant community</b> which has <b>grown naturally without human aid</b> and has <b>been left undisturbed</b> by humans for a long time. This is also known as a <b>virgin vegetation</b>.</li> <li>2. Cultivated crops and fruits, orchards form also part of vegetation <b>but not natural vegetation because man needs tools and fertilizers to help it grow</b>.</li> <li>3. The importance of natural vegetation lies on to <b>modify local climate</b>, control <b>soil erosion</b>, regulate <b>stream flow, support</b> a variety of <b>industries, provide livelihood</b> for many communities and offer panoramic <b>view</b> for recreation.</li> <li>4. It controls <b>windforce, regulate temperature</b> and causes <b>rainfall</b>. It also provides <b>humus</b> on the soil and <b>shelter</b> to the wild life.</li> </ol>

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<ul style="list-style-type: none"> <li>• windforce,</li> <li>• regulate temperature and rainfall</li> <li>• humus</li> <li>• shelter</li> </ul> <p>5. India's natural vegetation</p>	<p>5. India's natural vegetation has undergone drastic changes. Still, it holds key position in areas of inaccessible hilly regions and Marusthali.</p>
<b>D. LONG ANSWER TYPE QUESTIONS (4 MARKS)</b>	
<b>Q.1. Describe the major vegetation types found in the Himalayas. OR Why does mountain vegetation change with altitude ? Explain with example . (CBSE 2010)</b>	
<ol style="list-style-type: none"> <li>1. <b>the decrease in temperature with increase in altitude</b></li> <li>2. a distinct arrangement ranging from the tropical to the tundra region</li> <li>3. <b>Tropical evergreen forests</b></li> <li>4. <b>Tropical deciduous forests</b></li> <li>5. <b>Wet temperate forests</b></li> <li>6. <b>Temperate coniferous forests</b></li> <li>7. <b>Temperate grasslands</b></li> <li>8. <b>Alpine grasslands</b></li> <li>9. <b>Tundra vegetation</b></li> </ol>	<ol style="list-style-type: none"> <li>1. In mountainous areas, <b>the decrease in temperature with increase in altitude</b> leads to corresponding changes in natural vegetation.</li> <li>2. As such, there <b>is a distinct arrangement</b> ranging from the tropical to the tundra region in the montane forests of hilly and mountainous regions of the Himalayas.</li> <li>3. <b>Tropical evergreen forests</b> with rosewood, ebony and ironwood are found in rainier parts of the foothills and in higher altitudes upto above 1000 metres.</li> <li>4. <b>Tropical deciduous forests</b> of sal, teak, palas and bamboo are found in the foothills upto a height of 1000 metres.</li> <li>5. <b>Wet temperate forests</b> with evergreen broad-leafed trees like oaks and chestnut predominate between a height of 1000 and 2000 metres.</li> <li>6. <b>Temperate coniferous forests</b> with softwood trees like pine, deodas silver fir, spruce and cedar grow at altitude between 1500 and 3000 metres.</li> <li>7. They are followed by <b>temperate grasslands</b> at higher elevation. At high altitude of more than 3600 metres temperate forests and grasslands give way to alpine vegetation. Silver fir, junipers, pines and birches are common trees.</li> <li>8. As they approach the snowline they get progressively stunted. Shrubs, scrubs and then <b>alpine grasslands</b> are found at higher elevations.</li> <li>9. At still higher altitudes in shaded slopes, moss and lichens, typical of <b>Tundra vegetation</b>, grow.</li> </ol>

## NATURAL VEGETATION AND WILDLIFE

<b>Q.2. Describe how rainfall and relief influence the vegetation of an area.</b>	
<p><b>Rainfall:</b></p> <ol style="list-style-type: none"> <li>1. <b>Climate</b></li> <li>2. <b>Rainfall determines</b></li> <li>3. <b>Areas- heavy light</b></li> <li>4. <b>More than</b></li> </ol> <p><b>Relief</b></p> <ol style="list-style-type: none"> <li>1. <b>Type</b></li> <li>2. <b>Fertile</b></li> <li>3. <b>Rough terrains</b></li> <li>4. <b>Mountainous</b></li> </ol> <p><b>Relief and Rainfall</b></p> <ol style="list-style-type: none"> <li>1. <b>Windward slopes</b></li> <li>2. <b>Eastern slopes</b></li> </ol>	<p>Ans.</p> <p>Factors like rainfall and relief influence the natural vegetation of an area</p> <p><b>Rainfall :</b></p> <ol style="list-style-type: none"> <li>1. <b>Climate</b> plays an important role in determining the natural vegetation of a region.</li> <li>2. Rainfall determines <b>the type, character and extent of vegetation</b> in an area.</li> <li>3. Areas of <b>heavy rainfall</b> have dense vegetation with rich forests while arid areas and semi-arid areas with less rainfall have thorny and scrub vegetation.</li> <li>4. Areas <b>with more than</b> 200 cm of annual rainfall have tropical evergreen rainforests. Tropical moist deciduous forests are found in areas with 100 to 200 cm of rainfall. Tropical dry deciduous forests are found in areas receiving rainfall between 100 cm and 70 cm. In regions with less than 70 cm of rainfall the natural vegetation consists of thorny trees and bushes.</li> </ol> <p><b>Relief :</b></p> <ol style="list-style-type: none"> <li>1. The type of vegetation found in an area depends upon the relief or landform of the area.</li> <li>2. The fertile level lands of plains are generally devoted to agriculture.</li> <li>3. Much of the natural vegetation is cleared or altered in such areas. Grasslands and woodlands develop in areas with undulating and rough terrains.</li> <li>4. Mountainous areas have succession of vegetation types according to the altitude of the area.</li> </ol> <p><b>Relief and Rainfall.</b></p> <ol style="list-style-type: none"> <li>1. Windward slopes of Western Ghats are covered with thick forests because they receive heavy rainfall.</li> <li>2. The eastern slopes do not have thick forests because they are on the leeward side and receive less rainfall.</li> </ol>
<b>Q.3. Give a brief account about the wildlife of India.</b>	
	<p>Ans.</p> <p>Our country, India, has a rich natural heritage of fauna – 89,000 animal species, 1200 species of birds, 2500 species of marine and freshwater fish and 5 to 8 per cent of the world’s amphibians, reptiles and mammals are found in India.</p> <p>The wildlife in the different natural habitats are varied and rich.</p>

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<ol style="list-style-type: none"> <li>1. <b>Lions</b></li> <li>2. <b>Tigers</b></li> <li>3. <b>Elephants</b></li> <li>4. <b>Rhino</b></li> <li>5. <b>Wild ass</b></li> <li>6. <b>Camels</b></li> <li>7. <b>Ladakh</b></li>   <li>8. <b>Bison and deer</b></li> <li>9. <b>Colorful birds</b></li> <li>10. <b>Coastal areas</b></li> </ol>	<p>They include :</p> <ol style="list-style-type: none"> <li>(i) The majestic Indian lions found in the Gir forest of Gujarat, the last remaining habitat of Asiatic Lion. India is the only country in the world that has both lions and tigers.</li> <li>(ii) Tigers found in the national parks and wildlife sanctuaries in the forests of Madhya Pradesh, the Sunderbans of West Bengal and Himalayan region.</li> <li>(iii) The large Asian elephants of the hot wet forests of Assam, Karnataka and Kerala.</li> <li>(iv) The endangered one-horned rhinoceroses found in the swampy and marshy lands of Assam and West Bengal.</li> <li>(v) Indian wild ass of the Rann of Kachchh.</li> <li>(vi) Camels found in Thar desert.</li> <li>(vii) Ladakh's freezing high altitudes are home to yak, the shaggy horned wild ox, the Tibetan antelope, the bharal (blue sheep), wild sheep and the kiang (Tibetan wild ass), ibex, bear, snow leopard and rare red panda are found in some areas of the Himalayas.</li> <li>(viii) Indian bison, nilgai, chousingha (four-horned antelope), gazel, different species of deer and several species of monkeys are found in India.</li> <li>(ix) Many colourful birds, including peacock which is our national bird, are found in India.</li> <li>(x) Turtles, crocodiles and gharials are found in rivers, lakes and coastal areas. Snakes like cobras and others are found in different areas</li> </ol>
<p><b>Q.4. Why are some of the animals and plants endangered in India? How can they be protected? (Important) OR What steps have been taken by the government to protect flora and fauna of the country. (CBSE 2010) OR Write three measures to protect wildlife. (CBSE 2010) OR Write any three measures to conserve ecosystem. (CBSE 2010)</b></p>	
<p><b>WRITE Q.5. Quite a few species of plants and animals are endangered. Why?</b></p>	
<ol style="list-style-type: none"> <li>1. <b>More lands are being cleared</b></li> <li>2. <b>Pollution</b></li> <li>3. <b>hunting and poaching</b></li> <li>4. <b>excessive commercialization of plants</b></li> </ol>	<p>The main reason for extinction of</p> <ol style="list-style-type: none"> <li>1. Plant species are endangered as <b>more lands are being cleared for factories</b>, housing colonies and roads thus <b>reduced space for animal habitats</b>.</li> <li>2. <b>Pollution</b> of air, water and soil adds to the danger to natural vegetation.</li> <li>3. Animal species are getting extinct due to <b>hunting and poaching</b>.</li> <li>4. Certain species of plants is <b>excessive commercialization</b>.</li> </ol>

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<b>PLUS Q.12. What are the steps taken by the Government to protect flora and fauna in India? Write any three. [2011 (T-2)]</b>	
<p><b>5. Setting biosphere reserves</b></p> <p><b>6. Ecocodevelopment Projects</b></p> <p><b>7. Setting up - National Parks, wildlife sanctuaries and zoological gardens</b></p>	<p>Ans. To protect the flora and fauna of the country, the government of India has taken many steps, as stated below :</p> <p>5. <b>Fourteen biosphere reserves</b> have been set up in the country at different places to protect flora and fauna. Out of these <b>four have been included in the world network</b> of biosphere reserves.</p> <p>6.</p> <ul style="list-style-type: none"> <li>• <b>Project tiger,</b></li> <li>• <b>Project Rhino,</b></li> <li>• <b>Project Great Indian Bustard</b> and</li> <li>• And many other ecocodevelopmental projects have been introduced.</li> </ul> <p>7. Setting up</p> <ul style="list-style-type: none"> <li>• 89 National parks,</li> <li>• 49 wildlife sanctuaries and</li> <li>• zoological gardens are set up to take care of our natural heritage.</li> </ul>
<b>PLUS Q.9. Describe the main objectives of the Project Tiger and the Project Rhino and their effect on the wildlife in India. (Important)</b>	
<p><del>6. Name</del></p> <p><del>7. Purpose</del></p> <p><b>8. Objective</b></p> <p><b>(i)Protect - from</b></p> <p><b>(ii)Save habitat-why</b></p> <p><b>(iii)Maintain a survey – why</b></p>	<p>Ans-</p> <p><del>6. The Project Tiger and Project Rhino</del> are two well known wildlife conservation projects.</p> <p><del>7. They have been undertaken to protect</del> the Indian tiger and the one-horned rhino of India which are <b>endangered species.</b></p> <p>8. Their objectives of the <b>Project Tiger and the Project Rhino</b> are as follows :</p> <p><b>(iv) Protect the endangered species from poaching, hunting and illegal trading.</b></p> <p><b>(v) Save the natural habitats of these animals so that they can breed naturally and multiply in numbers.</b></p> <p><b>(vi) Maintain a survey of the number of existing tigers and rhinos to take informed decision.</b></p>

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<p><b>Result and laws</b></p> <p><b>9. Role – in</b></p> <p><b>10.Steps – in – by</b></p> <p><b>11. Awareness</b></p>	<p>9. These well publicized projects have played a great <b>role</b> in <b>protecting the endangered animals</b>.</p> <p>10. Under the projects government has undertaken <b>steps to save and protect</b> the existing animals <b>by banning hunting and poaching</b>.</p> <p>11. Wildlife Protection Acts to safeguard wildlife.</p> <p>12. Afforestation, social programmes and awareness campaigns can also help to protect endangered species.</p>
<p><b>Q.7. Give the main causes for depletion of biodiversity in India. (CBSE 2010)</b></p>	
<p>1. <b>rich variety of natural vegetation.</b></p> <p>2. <b>23 per cent of present under forests.</b></p> <p>3. <b>lower than the desired 33 per cent outlined in the National Forest Policy.</b></p> <p>4. Reason:</p> <p><b>1. Deforestation.</b></p> <p><b>2. Shifting cultivation</b></p> <p><b>3. Mining.</b></p> <p><b>4. Constructional activities</b></p> <p><b>5. Natural hazards</b></p> <p><b>6. Cyclonic storms</b></p>	<p>Ans.</p> <p>The varied climate and landform of India support of <b>rich variety of natural vegetation</b>.</p> <p>But only about <b>23 per cent</b> of the land area of India is at <b>present under forests</b>.</p> <p>It is far lower than the desired <b>33 per cent outlined in the National Forest Policy</b>. The main reasons behind the reduction of the natural vegetation of India are as follows :</p> <p>(i) <b>Deforestation</b>. Large areas of forests have been recklessly cleared by man due to the following reasons : (a) to meet the growing demand for cultivated land, (b) to acquire land for setting up industries, (c) to provide land for settlement and urbanisation.</p> <p>(ii) <b>Shifting cultivation</b> in hilly areas of northeast and Central India.</p> <p>(iii) <b>Mining</b>. Large areas are cleared of natural vegetation for the purpose of mining.</p> <p>(iv) <b>Constructional activities</b> like building of dams submerge areas of valuable forests and destruct the natural vegetation.</p> <p>(v) <b>Natural hazards</b> like forest fires and landslides affect natural vegetation in hilly areas. The Tsunami of 2004.</p> <p>(vi) <b>Cyclonic storms</b> affect plant cover of the areas where they strike. Overgrazing of pastures. (vii) Wiped off valuable rainforests in the Andaman and Nicobar Islands. These above mentioned human-made and natural factors have accelerated the process of extinction of natural vegetation in India.</p>
<p><b>Q.8. What type of dangers does the wildlife sanctuaries of India face? How can they be protected better? Write a brief note on each.</b></p>	

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<ol style="list-style-type: none"> <li>1. <b>Number of wildlife sanctuaries</b></li> <li>2. <b>Why</b></li> <li>3. <b>Dangers</b> <ol style="list-style-type: none"> <li>a) <b>Poaching</b></li> <li>b) <b>Hunting</b></li> <li>c) <b>Killing</b></li> <li>d) <b>Staff</b></li> <li>e) <b>funds</b></li> </ol> </li> <li>4. <b>Measures</b> <ol style="list-style-type: none"> <li>1. <b>Vigilance</b></li> <li>2. <b>Measures</b></li> <li>3. <b>Laws</b></li> <li>4. <b>Training</b></li> <li>5. <b>Boundary</b></li> <li>6. <b>Awareness</b></li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. <b>492 Wildlife Sanctuaries</b> have been set up in India to protect and conserve wildlife.</li> <li>2. The government has <b>demarcated them and maintains them</b>. But certain <b>external factors and loopholes</b> in internal management of these areas <b>creates problems</b> and affect their purpose.</li> <li>3. <b>Dangers</b> faced by wildlife sanctuaries of India are as follows :       <ol style="list-style-type: none"> <li>(i) <b>Poaching or illegal killing</b> of animals for trade of their hides, skins, tusk, horns and bones.</li> <li>(ii) <b>Hunting</b> of animals for <b>game</b>.</li> <li>(iii) <b>Killing</b> of animals by villagers in instances of migration of animals to inhabited areas <b>during floods</b>. In <b>North Bengal</b> often elephants move out from the <b>forests to cultivated fields</b> and are <b>killed by the villagers</b>.</li> <li>(iv) <b>Shortage of trained personnel</b> to take care of the animals within the sanctuaries. This leads to death of sick animals.</li> <li>(iv) <b>Shortage of funds</b> for management of the sanctuaries.</li> </ol> </li> <li>4. The wildlife sanctuaries can be protected better in the following ways :       <ol style="list-style-type: none"> <li>(i) <b>Strict vigilance</b> of the areas within the sanctuaries.</li> <li>(ii) <b>Enforcing strict measures</b> against people encroaching the wildlife sanctuaries without proper permission.</li> <li>(iii) <b>Making laws</b> against poaching and hunting more strict and punishing people who dare to destroy the sanctity of the wildlife sanctuaries.</li> <li>(iv) <b>Training the personnel</b> to take proper care of animals within the wildlife sanctuary.</li> <li>(v) <b>Creating a proper, protected boundary</b> for the wildlife sanctuaries.</li> <li>(vi) <b>Creating public awareness</b> regarding the need of wildlife sanctuaries.</li> </ol> </li> </ol>
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