



Class 9 Geography Notes

**Natural Vegetation and
Wild Life**

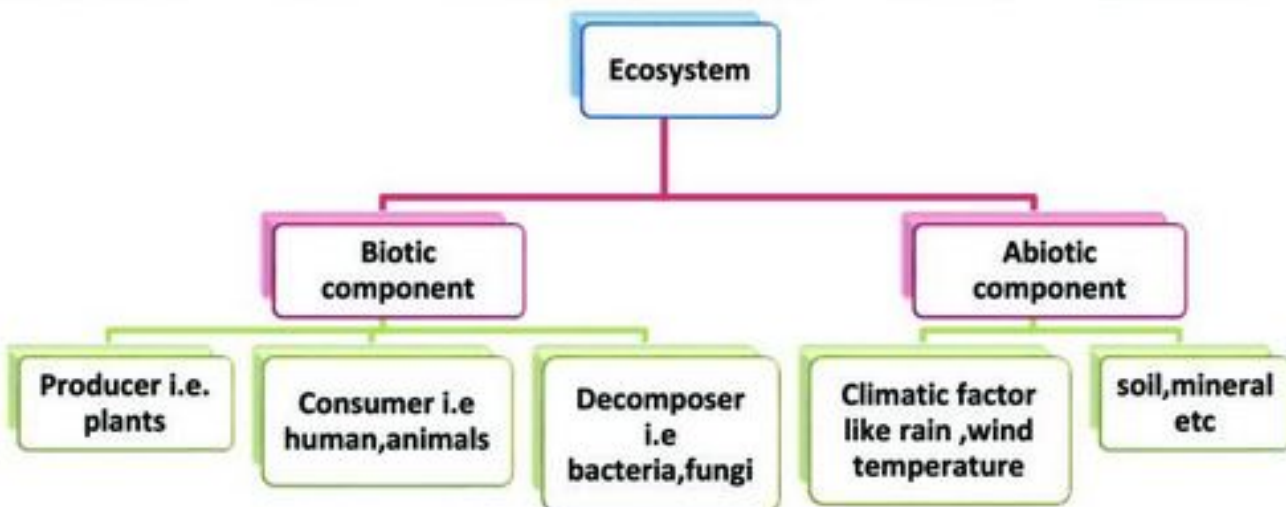
Key Notes and Important Questions with Answers

CHAPTER- 5

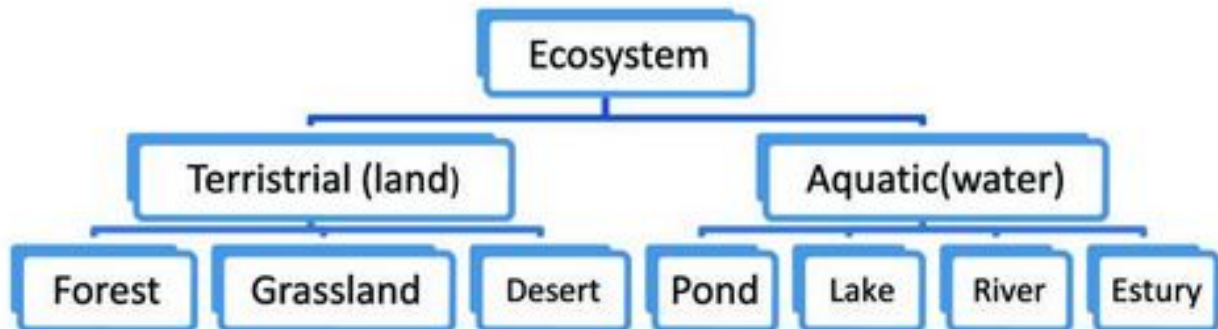
NATURAL VEGETATION AND WILD LIFE

POINTS TO REMEMBER :

- **Natural vegetation** refers to a plant community which has grown naturally without human intervention for a long time.
- Natural vegetation is also termed as “**Virgin Vegetation.**”
- On the basis of its residence it is of two types-
 - (a) **Endemic:** which are purely native
 - (b) **Exotic:** which are brought from some other place long ago
- The term **Flora** is used to denote plants of a particular region or period.
- Species of animals are referred as **Fauna.**
- Factors affecting Flora and fauna of a place:
 - I. Land
 - II. Soil
 - III. Temperature
 - IV. Sunlight
 - V. precipitation
- The system of interaction among biotic component and their interaction with abiotic component of a particular area is called **Ecosystem.** Eg. Pond ecosystem, river ecosystem, lake, forest, grassland etc.

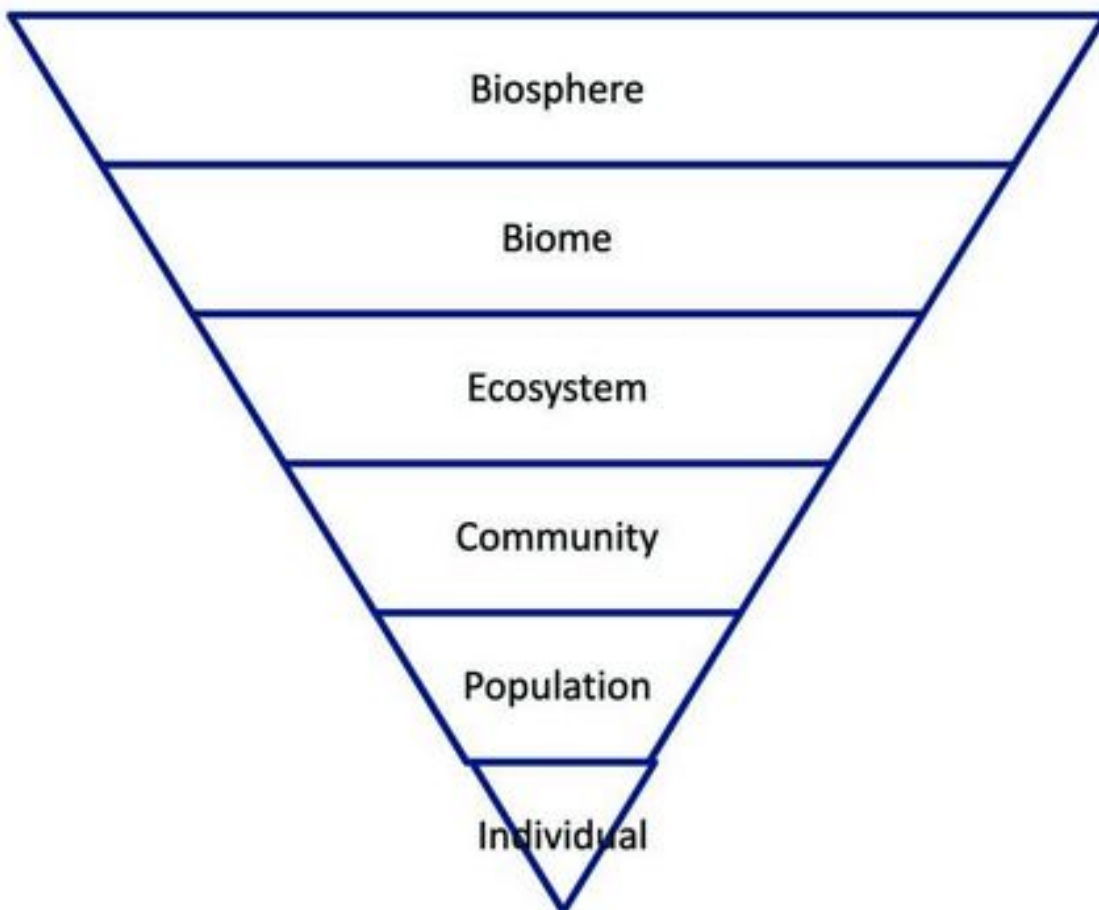


- Types of Ecosystem:



- A very large ecosystem of an area having distinct types of flora and fauna is called **Biome**.

A relation between different systems:



Characteristics of different types of Natural vegetation:

Types of Vegetation	Annual Rainfall		Characteristics	Important Vegetation	Important wild life	Found in States
Tropical Evergreen Forest (Tropical rain forest)	>200 cm		1. Warm and wet climate, 2. Trees shed leaves at different times of year 3. Height of Tree more than 60 m 4. Very dense & forms Canopy, 5. Woods are hard.	Ebony, Mahogany, Rosewood, Rubber, Cinchona	Elephant, Monkey, Lemur, Deer, Variety of birds, sloth, Scorpio, Snakes	Western Ghats, Andaman & Nicobar Island, Lakshadweep, Assam, Tamil Nadu
Tropical Deciduous Forest (Monsoon forest)	Wet deciduous	100 -200 cm	1. Same variety of Tree. 2. Shed their leaves at the same time of Year.	Teak, Sal, Shisham, Bamboos, Khair, Sandalwood, Arjun, Mulberry	Lion, Tiger, Deer, Pig, Elephant, Variety of birds, lizards, Snakes,	Jharkhand, Orissa, Chhattisgarh, North-Eastern states
	Dry Deciduous	70 - 100 cm	3. Woods are moderately hard	Teak, Sal, Peepal, Neem	Tortoise	Bihar, Uttar Pradesh
Thorn forest & Bushes	<70 cm		1, Mostly thorny bushes and Trees 2. Trees are deep rooted, 3. leaves modified into spine & stem have waxy coating to reduce loss of water	Acacia, Palm, Cacti, Euphorbis	Rats, Mice, Rabbits, Fox, Wolf, Wild Ass, Camel	Gujarat, Rajasthan, Arid area of Madhya Pradesh, Haryana Chhattisgarh

Himalayan Montane Forest	At Height 1000-2000 m Wet-Temperate	-----	1. Broad tree leaves 2. soft wood	Oak, Chestnuts	Kashmir Stag, Spotted Bear, Sheep, Jack Rabbit,	Jammu & Kashmir, Himachal Pradesh, Uttarakhand
	1500 m-3000 m (Temperate)	-----	1. cone shaped trees, 2. needle like leaves to protect from snow deposition, 3. at higher level grassland found	Pine, Deodar, Silver fir, Spruce, Cedar		
	>3600 m (Alpine vegetation)	-----	1. grassland used by pastoral nomads of that area	Juniper, Pine, Birches	Red Panda, Snow Leopard	
	Tundra Vegetation	-----	1. No trees or grassland are found	Mosses, Lichens	-----	
Mangrove Forest (Tidal forest)	-----		1. sundari trees has root submerged in saline water, provide hard timber	Sundari, Palm, Coconut, Agar,	Bengal Tiger, Turtles, Crocodiles, Gharials, Snakes	Delta of Mahanadi, Kavari, Godavari, & West Bengal,

- **Wildlife Protection Act** was implemented in **1972** in India.
- India is the **only country** in the world that has **both Lion and Tiger**.

- **Gir forest** of Gujarat is the last remaining habitat of Asiatic lion.
- The country has around 90,000 animal species, 2000 species of bird, 2,546 species of fishes and 5-8% of world's amphibians, reptiles and mammals.
- **To protect the flora and fauna the government has taken followings steps-**
 - I. Fourteen biosphere reserves have been set up in the country to protect flora and fauna.
 - II. Financial and technical assistance is provided to many Botanical Gardens by the government since 1992.
 - III. Project Tiger, Project Rhino, Project Great Indian Bustard and many other eco developmental projects have been introduced
 - IV. 89 National Parks, 490 Wildlife sanctuaries and Zoological gardens are set up to take care of Natural habitat of the fauna.

Fourteen bio sphere reserves are:

Biosphere Reserve	Location State	Biosphere Reserve	Location State
Sundarban	West Bengal	Simlipal	Orissa
Gulf of Mannar	Tamil Nadu	Dihang-Dibang	Arunachal Pradesh
The Nilgiris	Tamil Nadu, Kerala, Karnataka	Dibru Saikhowa	Assam
Nanda Devi	Uttarakhand	Agasthyamalai	Kerala, Tamil Nadu
Nokrek	Meghalaya	Kanchenjunga	Sikkim
Manas	Assam	Panchmari	Madhya Pradesh
Great Nicobar	Andaman and Nicobar Island	Achanakmar-Amarkantak	Madhya Pradesh, Chhattisgarh

- Relation between National park, Sanctuary and Biosphere Reserve-

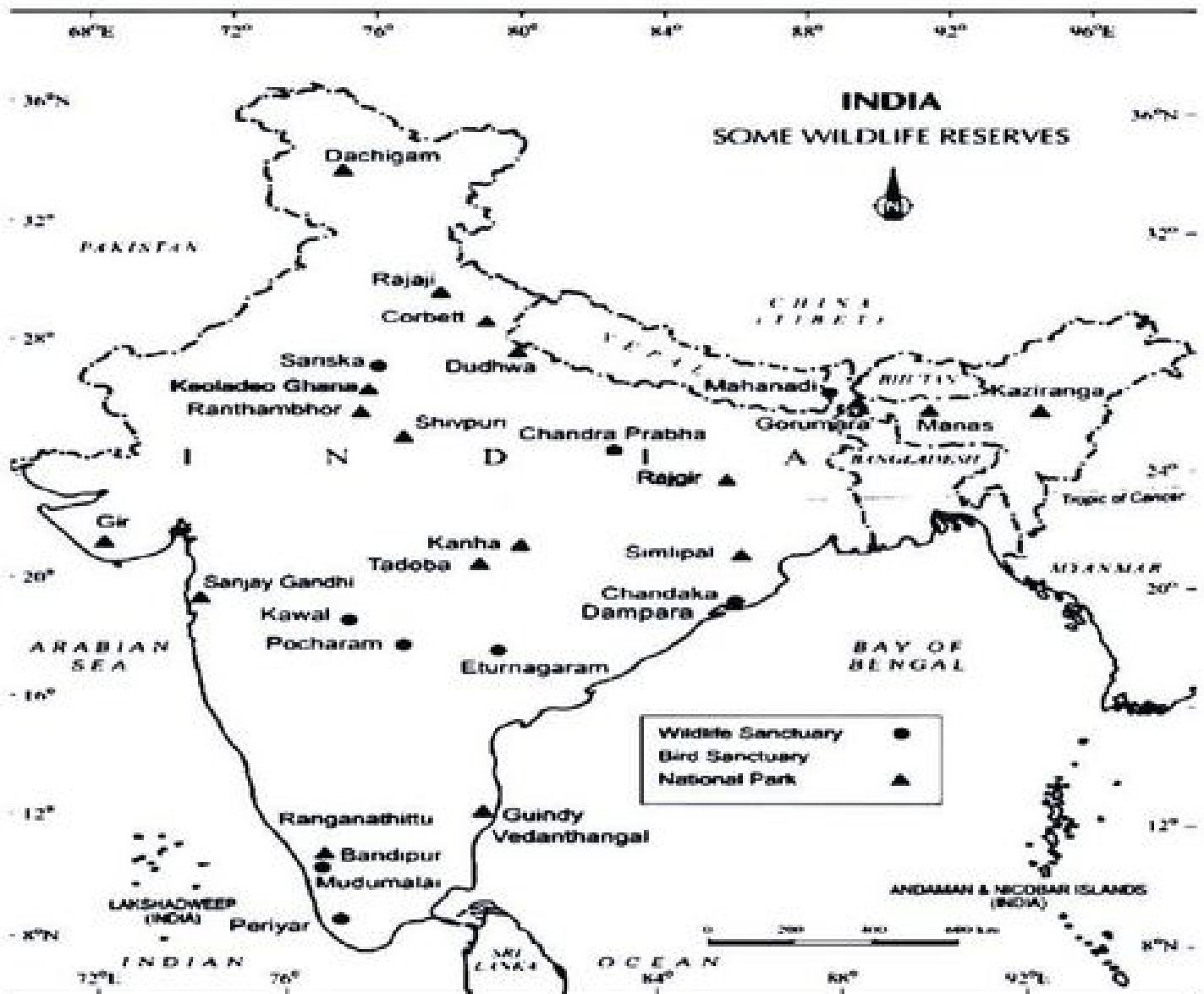
National Park	Sanctuary	Biosphere Reserve
Habitat for particular plant or wild animal. Eg Jim Corbett National Park for tiger reserve.	A natural area reserved for species-oriented plant or animals. Eg Manas Bird Sanctuary	A natural area meant to reserve all form of life i.e over ecosystem oriented. Eg. Simlipal Bio Reserve
General size range is 0.04 to 3162 sq. km	General size range is 0.61 to 7818 sq. Km	The general size range is over 5670 sq. Km
Boundaries fixed by legislation	Boundaries are not inviolable	Boundaries fixed by legislation
Except buffer zone ,no interference	Limited interference	Except buffer zone no biotic interference
Tourism permissible	Tourism permissible	Tourism generally not permissible

- India's National Park And Preserved Wildlife

Sl no.	National Parks	State	Establishment Year	Preserved Wildlife
1	Kaziranga	Assam	1974	One Horned Rhino, Elephant, Tiger
2.	Manas	Assam	1990	Roofed Turtle, Golden Langur
3.	Gir	Gujrat	1975	Asiatic Lion
4.	Hemis	Jammu & Kashmir	1981	Snow Leopard
5.	Bandipur	Karnataka	1974	Asian Elephant, Tiger
6.	Periyar	Kerala	1982	Nilgiri Languor, Flying Squirrel

7.	Eravikulam	Kerala	1978	Nilgiri Thar, Atlas Moth, Elephant
8.	Bandhavgarh	Madhya Pradesh	1982	Tiger, Leopard, Boars
9.	Kanha	Madhya Pradesh	1955	Tiger, Leopard, Elephant
10.	Madhav	Madhya Pradesh	1959	Indian Gazelle, Nilgai, Sambar
11.	Panna	Madhya Pradesh	1973	Tiger, Wolf, Chital, Wolf
12.	Keoladeo	Rajasthan	1981	Siberian Crane, Migratory Bird Species
13.	Ranthambore	Rajasthan	1980	Tiger, Leopard, Boars
14.	Sariska	Rajasthan	1982	Four Horned Deer, Caracal, Leopard
15.	Madumalai	Tamil Nadu	1940	Tiger, Leopard, Elephant, Vulture
16.	Corbett	Uttarakhand	1936	Tiger, Leopard, Elephant
17.	Nanda Devi	Uttarakhand	1988	Tiger, Leopard
18.	Valley Of Flowers	Uttarakhand	1980	Snow Leopard, Musk Deer, Red Fox
19.	Dudhwa	Uttar Pradesh	1977	Tiger, Rhino
20.	Sunderban	West Bengal	1984	Royal Bengal Tiger

• **MAP SKILLS**



1 Mark Questions:

1. Name any two trees found in tropical rain forest?
2. Which vegetation is important for commercial point of view?
3. In which state of India Asiatic Lion is found?
4. In which state Simlipal biosphere reserve is situated?
5. When was the Wild Life Protection Act passed in India?
6. Which type of forest is affected by the tides?
7. Name any two types of medicinal plant.
8. What is natural vegetation?
9. Why natural vegetation is called "virgin vegetation"?
10. What is Ecosystem?
11. Give any two products of rain forest.

12. A person has reached in a forest where there was dark even at noon. Where could he be?
13. A new boy admitted to your class told you that he belong to the state which is home of one horn rhino. For which state he was referring to?

3/5 Mark Questions:

1. Explain the factors affecting natural vegetation of a place?
2. Differentiate between tropical rain forest and tropical deciduous forest?
3. Write a short note on the diversity of flora and fauna in India.
4. What is the need of conserving bio-diversity?
5. List five different types of forest products.
6. What are the steps taken by the government to protect wildlife?
7. Describe the variety of vegetation found in different altitude of Himalaya?
8. What are the causes of depletion of flora and fauna in India?
9. What will happen if all the tigers are dead?
10. Distinguish between thorn forests and mangrove forests on the basis of rainfall, vegetation and location.
11. Why tropical rain forest is called evergreen forest?

Answers

1Mark questions

1. Ebony, Mahogany, Rosewood, Rubber, Cinchona(any two)
2. Tropical deciduous forest.
3. Gujarat
4. Orissa
5. 1972
6. Mangrove forest
7. Neem, Tulsi
8. Natural vegetation refers to a plant community which has grown naturally without human intervention for a long time.
9. As natural vegetation has grown without human aid and has been left undisturbed for long time, they are also referred as virgin vegetation.
10. The system of interaction among biotic component and their interaction with abiotic component of a particular area is called Ecosystem. Eg. Pond ecosystem, river ecosystem, lake, forest, grassland etc.
11. Timber ,rubber, medicine(cinchona)
12. Tropical evergreen forest.
13. Assam

3/5 Mark questions:

1. (i) Land –nature of land influences type of vegetation as the undulating and rough terrains developed into a variety of natural wildlife as compared to fertile land which undergoes agricultural work.
- (ii) Soil –different types of soil support different vegetation. Eg.sandy soil supports thorny bushes where as deltaic soil support mangrove vegetation.
- (iii) Temperature- as we can see that tropical area has variety of vegetation as compared to temperate region. Moreover as we go to the higher altitude, vegetation cover changes from temperate forest to grassland to tundra and finally alpine type.
- (iv) Precipitation – heavy rainfall areas have generally dense vegetation cover as compared to scanty rainfall areas.
- (v)Sunlight-it is observed that due to longer duration of sunlight trees grows faster in summer as compared to other season of year.

2.

Sl. No.	Tropical evergreen forest	Tropical deciduous forest
1.	They are also called Rain forest	They are also called Monsoon forest.
2.	Trees shed their leaves at different types of year.	Trees shed their leaves at the same time of year.
3.	They are grown in the areas having warm and wet climate throughout the year.	They are grown in areas where seasonal change occurs with rainfall in summer.
4.	They grow in areas having annual rainfall more than 200 cm.	They grow in areas having annual rainfall of 70 to 200 cm
5.	Vegetation is so dense that even sunlight cannot reach to ground.	Vegetation is not so dense.
6.	Plant found here are ebony, mahogany, rosewood, rubber etc	Trees found here are Neem, banyan, Peepal, mango, Sal, Shisham etc.

- 3.(i) India has variety of flora and fauna. 89 National Parks, 490 Wildlife sanctuaries and Zoological Gardens are set up to take care of Natural habitat of the fauna. There are 14 biosphere reserves too.
- (ii) Five different types of vegetation cover are found here which ranges from rainforest to thorny bushes as well as snow clad alpine vegetation.
- (iii) India is rich in its fauna. It has approximately 90,000 of animal species. The country has about 2,000 species of birds. They constitute 13% of the

world's total. There are 2,546 species of fish, which account for nearly 12% of the world's stock. It also shares between 5 to 8 per cent of the world's amphibians, reptiles and mammals.

- (iv) The elephants are found in the hot wet forests of Assam, Karnataka and Kerala.
- (v) One-horned rhinoceroses live in swampy and marshy lands of Assam and West Bengal.
- (vi) Arid areas of the Rann of Kachchh and the Thar Desert are the habitat for wild ass and camels. Indian bison, *nilgai* (blue bull), *chousingha* (four horned antelope), gazel and different species of deer are some other animals found in India
- vii) India is the only country in the world that has both tigers and lions.
- viii) Ladakh's freezing high altitudes are a home to yak, the shaggy horned wild ox weighing around one tonne, the Tibetan antelope, the bharal (blue sheep), wild sheep, and the *kiang* (Tibetan wild ass).
- (ix) In the rivers, lakes and coastal areas, turtles, crocodiles and gharials are found.
- (x) Peacocks, pheasants, ducks, parakeets, cranes and pigeons are some of the birds inhabiting the forests and wetlands of the country.

4. Every species has a role to play in the ecosystem.

- (i) we have selected our crop from a biodiverse environment.
- (ii) we have got too many medicinal plant from this,
- (iii) the animals we have as our livestock is also selected from the large variety of fauna,
- (iv) Even insect help in pollination which we know is essential,
- (v) how can we forget in the role of microorganism which sustains the flow of energy for our survival.

5.(i) Timber from mahogany, sal, teak trees

(ii) Medicines from *Sinchona*, Arjun, Neem, Babool tree

(iii) Rubber from the latex of rubber tree

(iv) Wood Pulp are obtained from the softwood trees like spruce, pine, fir for making paper

(v) Firewood

(vi) Honey etc.

6. To protect the flora and fauna the government has taken followings steps-

(i) Wildlife Protection Act was implemented in 1972 in India.

(ii) Fourteen biosphere reserves have been set up in the country to protect flora and fauna.

(iii) Financial and technical assistance is provided to many Botanical Gardens by the government since 1992.

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7.

Types of Vegetation	Annual Rainfall	Characteristics	Important Vegetation	Important wild life
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	>3600m (Alpine vegetation)	1. grassland used by pastoral nomads of that area	Juniper, Pine, Birches	Red Panda, Snow Leopard
	Tundra Vegetation	1. No trees or grassland are found	Mosses , Lichens	-----

8. Causes of depletion of flora and fauna are-

(i) Hunting of animals by poachers for skin, tusks etc.

(ii) Commercial exploitation of forest products for wood, medicines, paper etc

(iii) Mining activity

(iv) Pollution due to chemical industrial waste

(v) Reckless cutting of forest to bring land under cultivation and inhabitation

9. (i) If all the tigers are dead at a place it will mean that a part of carnivores are absent.

(ii) it will result in the rise of number of deers, nilgai ,and other herbivore animals.

(iii) with the rise in number they will be forced to move toward human settlement for food and graze the crop.

(iv) this will lead to the scarcity of food for human and may be catastrophic for its existence.

10.

Thorn Forests

1. Rainfall:- Rainfall in these types of forests are somewhere 70cm or less.

2. Vegetation:- Babool, kiker, palm, cacti and acasia are the main plants.

3. Location:- Found in semi-arid regions of Gujrat, Rajasthan, Haryana and Uttar Pradesh.

Mangrove Forests

1. Rainfall:- These types of forests develop in the deltaic region, and does not concern with the rainfall.

2. Vegetation:- Sundari is the major tree type in these types of forests. The others are Agar and Korea.

3. Location:- They are found in the deltas of Ganga, Mahanadi, Kaveri, Krishna and Godavari.

11.(i) These forest have plenty of varieties of vegetation .

(ii) These plants shed their leaves at different times of year.

(iii) Thus when one species of plant shed their leaves others still have their leaves intact.

(iv) In this way these forest always look full of greenery, and are so called evergreen forest.