

NATURAL VEGETATION AND WILD LIFE

- India is one of the twelve mega-bio-diversity countries of the world. They are a group of countries that have the majority of Earth's species and therefore considered extremely bio-diverse.
- Being a vast country, India having 47,000 plant species, occupies 10th position worldwide and 4th in Asia. Non-flowering plants such as ferns, algae, and fungi also grows here. It also has around 90,000 species of animals and insects.
- Natural vegetation - or virgin vegetation means the plant community which has grown naturally without any human intervention for a long time. The natural vegetation, which is left undisturbed over a long period of time is called virgin vegetation.
- Two types of Virgin vegetation include -
 - ⇒ Endemic Species - Plant species which originated from the country.
 - ⇒ Exotic species - Plant species which originated outside the country.

→ Factors affecting diversity :-
⇒ Factors which influence the variety of flora and fauna include :-

• Relief - It includes land and soil.

- Land - Affects the natural vegetation both directly and indirectly. The nature of the land i.e., whether it is plain, hilly or a plateau, determines the kind of vegetation which will grow in it. Fertile lands are used ~~is~~ for growing, crops, vegetables and fruit.

- Undulating and rough surfaces generally develop either into grasslands or woodlands. Different types of land accordingly sustain and provide shelter to different kinds of wildlife.

• ~~Soil~~ Soil

- The soil also varies from place to place. Different kinds of soils provide different kinds of vegetation. For ex - Alluvial or deltaic soil of a river near the sea will sustain mangrove forests while slopes of hills have conical trees. The sandy soils of desert sustain thorny bushes.

- Climate

- It includes temperature, photoperiod and precipitation.

- Temperature

- The temp. along with humidity in the air and precipitation determine the character of vegetation and its extent.

As the climate gets colder, either by increase in altitude or by going away from the equator, the vegetation will change from tropical to sub-tropical temp. and then alpine.

- Photoperiod (Sunlight)

- The amount and duration of sunlight is known as photoperiod. The difference in latitude, altitude and season brings variation in duration of sunlight in different places. In warmer regions and climates, plant growth is faster due to longer duration of sunlight, especially with the availability of adequate moisture. An instance is the fact that the Southern Slopes of the Himalayas are covered with thicker vegetation than the Northern slopes.

- Precipitation.

- Advancing South-West Monsoon and retreating North-East Monsoons bring almost all rainfall in India. Areas of heavy rainfall always have denser vegetation than other areas with lesser rainfall. The South-West monsoon rains on the windward side of Western Ghats, thus cause a heavy growth of tropical evergreen forests there, whereas leeward side does not have any such forests.

- Ecosystem

- Various species of plants occur in areas having similar climatic conditions. To a large extent its nature determines the animal life in that area. All the plants and animals in an area are ~~independent~~ interdependent on each in their physical environment and form an ecosystem.

- Biome

- It is a major community of plants and animals having similar life forms existing under similar environmental conditions. A biome is identified on the basis of plant existing there. It is also termed as 'major life zone'.

- * Human influence in an Ecosystem.

⇒ They utilise the vegetation and wildlife.

⇒ The greed of human beings leads to over utilisation of natural resources.

⇒ Human beings cut the trees and kill the animals creating ecological imbalance.

⇒ Due to the activities of human beings, some of the 'plants and animals have reached the verge of extinction'.

- * Forests are advantageous for the Environment. They influence climate, reduce soil erosion, regulate stream flow, provide raw material for industries and livelihood for many, etc.

They control wind force and temp. and cause rainfall. They always provide shelter to various animal species.

• Factors like growing demand for cultivated land, development of industries and mining, urbanisation have changed natural vegetation. The vegetation cover of India in large parts is no more natural in the real sense, except in some inaccessible regions like the Himalayas, the hilly region of Central India and Marusthali. In most of the places, it is either modified, replaced or degraded by human interference.

✧ Types of vegetation include.

- ⇒ Tropical Evergreen Forests
- ⇒ Tropical Deciduous Forest
- ⇒ Tropical Thorn Forests and Scrubs
- ⇒ Montane Forests.
- ⇒ Mangrove Forests.

Answers the following questions.

1. What is natural vegetation and virgin vegetation.

Ans - ~~The~~ Natural vegetation or virgin vegetation is referred to as the plant community which has been left undisturbed by the human aid and has grown naturally over a period of time.

2. What is flora and fauna.

Ans - Flora is used to refer to plant species of a particular region whereas fauna is used to refer to animal species.

3. "Land and soil affects the natural vegetation directly and indirectly." Justify by giving two examples.

Ans - Land and soil affects the natural vegetation directly and indirectly. Two examples to justify this statement are

(i) The Sandy Soil of the desert supports cactus and thorny bushes.

(ii) Wet, Marshy and deltaic soil supports mangroves.

4. What is an Ecosystem?

Ans - An ecosystem is a community which includes different organisms such as plants, animals and smaller bugs and insects that live, feed, reproduce and interact in the same area or environment.

5. Name two non-flowering plants.

Ans - Ferns and Algae are two non-flowering plants.

6. Name any two factors that form the flora and fauna.

Ans - Climate and Soil are two factors that form the flora and fauna.

7. What is a biome?

Ans - A large ecosystem which contains different types of vegetation and animals is known as biome.

8. Why does India possess a great variety of flora and fauna?

Ans - India possesses a great variety of flora and fauna due to -:

(i) Different types of soils

- (ii) Different climatic conditions.
- (iii) Longer duration of Sunlight.
- (iv) Precipitation

9. Describe the Major Vegetation zones in Himalayas

Ans (i) In the foothill, the Shiwalik are the tropical deciduous forests. 'Sal' is the most important species of economic significance.

(ii) The zone with altitude 1000m - 2000m consists of evergreen forests, Beech, Chestnut, oak, ash, etc are the main trees. These at a higher altitude are replaced by 'chir' and 'chil'.

(iii) The zone between 1500m - 3000m includes pine, cedar, silver fir and spruce. They are the famous coniferous trees, typical of the dry temperate region found in the Inner Himalayan region.

(iv) At the height of 3600m or more, shrubs, scrubs, and grasses of alpine variety are found.