

Climate

Climate vegetation and animals

Climate vegetation

Climate vegetation is a broad category
which groups various different
types of vegetation together by their
characteristics. It is determined by factors
such as temperature, rainfall, and
soil. It is a broad category.

Climate

These plants and animals
that exist only in one geographic
area.

Climate

It is defined as 'regional
and country naturally occurring
plant life that originated in
a particular place'.

Climate (Arctic species)

These species
of plants and animals that are
found in a narrow region
of the world.

Factor affecting the vegetation:-

Term flora is used to define plants of a particular season while fauna is to represent a particular region or region of animal. We can see a huge diversity in the kingdom of flora and fauna due to following factors:-

(i) Land:-

The nature of land influences the type of vegetation. Fertile land is generally for agriculture, rough lands are areas where grassland and woodlands develop to give shelter to a variety of wildlife.

(ii) Soil:-

Different type of soil provide basis for different vegetation. The sandy soil of desert support cactus and thorny bushes, while wet, marshy soil support mangroves.

(iii) Temperature:-

The character and extent of vegetation are mainly determined by temperature along with

Humidity, precipitation and soil.

(ix) Photoperiod :- (Sunlight):-

The variation in duration of sunlight is due to differences in altitude, latitude, season and duration of the day.

(v) Precipitation:-

Almost the entire rainfall is brought in by the advancing south west monsoon and retreating northeast monsoon.

Remark:- Higher areas have more dense vegetation as compared to less rainfall areas.

Ecosystem:-

An ecosystem is a community of living organisms in conjunction with the non-living component of their environment, interacting as a system. These biotic and abiotic components are linked together through nutrient cycle and energy flows.

Types of Vegetation:-

The following major type of vegetation may be identified.

- ① Tropical Evergreen Forest (Rainforest):-
{ Equatorial moist evergreen forest }

⇒ This evergreen hardwood forest is the natural vegetation of low latitude high precipitation zone. This vegetation generally occurs in between 10° North & South of equator where annual rainfall is very high and distributed equally throughout the year.

★ The total extent of tropical rainforest was 714 million hectares in 1990, which is half of ^{the} world's forest cover.

- a- South American basin.
- b- Equatorial Africa (Africa, Zaire and Congo).
- c- Asia (western India and Sumatra)
- d- South-East Asia (Indonesia, Malaysia, Philippines), etc.

✍

★ Climatic characteristics:-

- (i) Rainfall:- annual rainfall exceeds 200cm.

- (ii) Temperature:- annual temp. is 30°C
(iii) Relative humidity:- varies between 80 to 90% .

★ Vegetation:-

Trees are evergreen hardwood type:- Example:- Mahogany, Teak, Ebony, Rubber, Palm, Bamboo and Cane, etc.

Animals:-

The common animals are:- Elephant, Monkey, Sambar and deer. 1 Horn Rhinoceroses are found in the jungle of Assam and West Bengal.

Remark:- Due to the presence of trees of different height several canopy also develop.

● Tropical Deciduous forests:-

These are the most widespread forests of India. They are also called the monsoon forests and spread over the region receiving rainfall between 200 cm and 70 cm. Trees of this forest type shed their leaves for about six to eight weeks in dry summer.

Date / /
Page No.

The forest is found in areas receiving rainfall between 200 and 500 cm. These forest exist in some places that are:-

- a- Northeastern states of India
- b- Jharkhand
- c- West Odisha
- d- Chhattisgarh

Climatic characteristics:-

Relative Humidity:- almost 80% to 90% usually throughout the year.

Temperature:- It is about 30°C.

★ Vegetation:-

Teak is the most dominant species of this forest. Example:- Bamboos, Sal, Shisham, Sandalwood, Mulberry, etc.

★ Animals:- The common animals are:-

lion, tiger, pig, deer, elephant and a huge no. of variety of birds, snakes, lizards, tortoises are also found here.

Remarks:- As seasons change the colour of the leaves of the deciduous forest also change.

The Thorn forest and Scrubs:-

In the regions with less than 70 cm of rainfall the natural vegetation consists of thorny trees and bushes. This type of vegetation is found in the north-western part of the country they are:-

- Semi-arid areas of Gujarat
- Rajasthan.
- Madhya Pradesh.
- Southern Africa
- Smaller areas of America, Australia, etc.

Climatic characteristics:-

- Rainfall:- Seasonal rainfall averaging 250 to 500 mm
- Trees are scattered and have long roots penetrating deep into the soil in order to get moisture.

Wildlife:-

India has approximately 90,000 animal species and it constitutes 13% of the world's total 2200 species of fish that is 12% of world's stock.

Q.10

The Himalayas have a hardy range of animals, which survive in extreme cold. Elephants are found in Assam, Karnataka and Kerala. One horned rhinoceros are found in swampy and marshy lands of Assam and West Bengal. Arid areas of the Rann of Kachchh are habitat for wild ass and camels.