A forest is a large area having a wide variety of plants and animals. Forest cover around one third of the earth’s surface. They are generally found in those areas that have a steady supply of sunlight and rainfall. That’s why they are not found in the Tundra and the Desert region.

The density of a forest depends upon the amount of rainfall received by the area. If there is rainfall throughout the year there will be dense growth of trees, if there is moderate rainfall the trees will be less dense. But the forests are slowly depleting because of various human activities.

**Types of forests:**

Forests have a wide variety of flora and fauna. The forests differ in types of trees, intensity of trees grown, types of leaves, fruits and flowers.

1. **Equatorial or tropical forests:** They are also called Rain forests. They are found in Indonesia, Amazon and Congo basin.
   a) They are dense and varieties of species found here are innumerable
   b) The weather remains same throughout the year i.e., hot and humid
   c) Heavy rainfall.
   d) They are hard wood forests.
   e) Mahogany, Rosewood, Ebony, Bamboo trees are found here.

2. **Coniferous forests:**
   a) Most of the trees are evergreen that is, trees do not shed their leaves at the same time. Therefore, they remain green throughout the year.
   b) The leaves of the trees are needle like and coated with wax to reduce water loss.
   c) Winter is long and exceptionally cold.
   d) Pine and spruce trees are found here.
3. **Deciduous forests**: Tropical deciduous forests are also called Monsoon forests. They are found in eastern and western U.S.A, Canada, South America, China, etc.

   a) They shed their leaves on the onset of summer and new leaves appear in rainy season.
   b) These forests are not as dense as rain forests.
   c) Most of the trees have thick, rough and coarse bark
   d) Sal, teak, Maple and Oak trees are found here.

**Role of forests**

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**Importance of forests:**

1. Forests provide food and shelter to various animals.
2. Forests help to regulate climate, control flood and landslides.
3. Forest prevent soil erosion. Erosion means the removal of the top layer of the soil. The roots of the trees hold the soil particles together. Thus due to deforestation the land remains vacant and the soil is easily eroded away by wind, water and rainfall.

4. Forests help in regulating water cycle. Trees and plants absorb water from the soil and transpire vapours from their surface in order to help in formation of clouds. This is called Evapotranspiration. This result in rainfall.

5. Forest is a natural store house of resources. It provides fuel wood. Wood is an important source of energy for cooking. Fodder for cattle is also provided by forest. Several species of grasses, shrubs and trees are utilized for grazing purposes. It provides timber for various purposes. It is used in various industries like plywood, paper and pulp, etc. Bamboo and cane are used for making items like baskets, walking sticks, etc. Forests provide plant fibers like coir from coconut trees. It is used in making ropes.

6. Forests are an important source of medicines like:
Deforestation:-

Factors responsible for large scale deforestation

- Faulty agricultural practices like shifting cultivation
- Construction of multipurpose projects
- Growing industrialisation and urbanisation
- Expansion of mining activities
- Construction and expansion of railway networks
CONSERVATION OF FORESTS:
Due to an increase in population, the demand for various resources is also increasing. Fulfillment of those demands is resulting in uncontrolled cutting of forests. To avoid deforestation we should adopt the following methods:
1. Controlled grazing by animals.
2. Planting of trees or Afforestation.
3. Construction of dams, reservoirs should not be done by cutting forests.
4. Cutting of trees should be allowed only when twice number of trees is planted to maintain balance.
5. People should be made aware about the importance of forests and they should themselves take actions against undue cutting of forests.

MOVEMENT TO SAVE FOREST
CHIPKO MOVEMENT
DO YOU KNOW?

The Chipko Movement or Chipko Andolan started in the early 1970s in the Garhwal Himalayas of Uttarakhand as a result of growing awareness towards rapid deforestation. The main event of this struggle took place on March 26, 1974, when a group of female peasants in Chamoli district, Uttarakhand, India, took initiative to prevent the cutting of trees by hugging them.

Exercise

1. Complete the following sentences.
a) ______________ trees are found in hot and humid weather conditions.
b) ___________ and ______________ trees are examples of Deciduous forests.
c) _____________ is used in cure of Rheumatism.
d) ______________ is an important medicine for the cure of Malaria.
e) Forests help in recharging of _______________ water.

2. Match the following.

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
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<tbody>
<tr>
<td>1. Chipko movement</td>
<td>a) Removal of the top layer of the soil.</td>
</tr>
<tr>
<td>3. Equatorial forest</td>
<td>c) Chamoli District.</td>
</tr>
</tbody>
</table>

3. Answer the followings in short.

a) What are forests?
b) How do the forests help in preventing Soil Erosion?
c) What is Chipko movement?
d) Name some products obtained from forests.

4. Answer the following in detail.

a) How do forest help in regulating Water Cycle?
b) What steps should be taken for the conservation of Forests?
c) Write some characteristics of Equatorial forest?
d) Differentiate between Deciduous and Coniferous forests.