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INSTITUTE FOR CIVIL SERVICE EXAMS
SOUTH INDIA'S PREMIER INSTITUTION FOR PUBLIC POLICY AND CIVIL SERVICE EXAMS

NCERT
GEOGRAPHY

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NCERT CONDENSED / SUMMARISED
CLASS 7

Notes

Class 7 Geography Chapter 1 Environment

Nature, place, people, things, etc. that surround the living organisms make the environment. The environment can broadly be classified into the natural and human environment. It is a combination of both natural as well as man-made phenomena.

The natural environment comprises biotic (plants and animals) and abiotic conditions (land, water, air, etc.), whereas the man-made phenomena comprise the activities and interactions among human beings (roads, bridges, etc.).

Natural Environment

- Land, water, air, plants and animals comprise the natural environment.
- Lithosphere, atmosphere, hydrosphere and biosphere are the four domains of the natural environment.
- The lithosphere is the solid crust or the outermost layer of the earth where we live. It contains landforms like mountains, plateaus, plains and valleys.
- The hydrosphere is the domain of water. It comprises water bodies like rivers, lakes, seas, oceans, etc.
- The atmosphere is the thin layer of air that surrounds the earth. It protects us from the harmful rays and scorching heat of the sun.
- The biosphere is a narrow zone of the earth where land, water and air interact with each other to support life.

What is Ecosystem?

- The relation between the living organisms as well as the relation between the organisms and their surrounding form the ecosystem.
- There could be an ecosystem of large rainforest, grassland, desert, mountains, lake, river, ocean and even a small pond.

Human Environment

- Human beings interact with the environment and modify it according to their needs.
- Early humans adapted themselves to their natural surroundings.
- With time, humans learnt to grow new things, domesticate animals and lead a settled life.
- The industrial revolution, transportation and information revolution made communication easier and speedy across the world.

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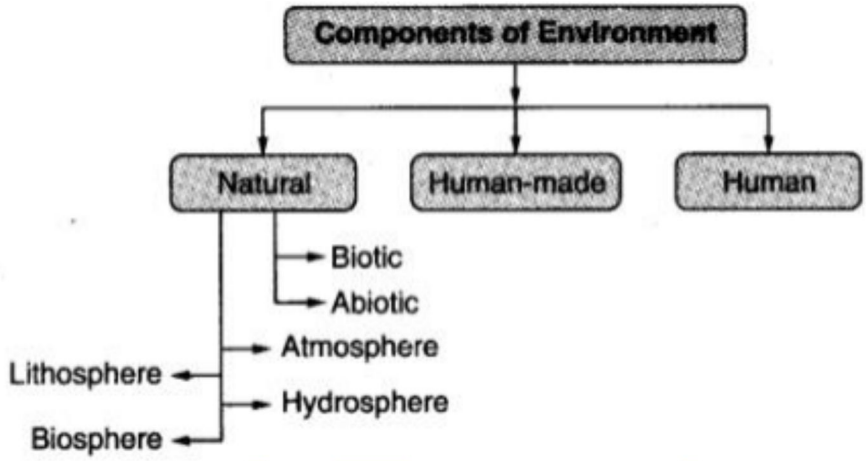
- Man is destroying the environment through deforestation, industrialisation, etc.



Important Terms:

- **Environment:** The place, people, things and nature that surround any living organism is called the environment.
- **Biotic:** It refers to the world of living organisms, such as plants and animals.
- **Abiotic:** It refers to the world of non-living elements such as land.
- **Lithosphere:** It is the solid crust or the hard top layer of the earth.
- **Hydrosphere:** It refers to the water bodies like rivers, lakes, seas, oceans, etc. on the earth.
- **Atmosphere:** It is the thin layer of air that surrounds the earth.
- **Ecosystem:** The relation between the living organisms, as well as the
- relation between the organisms and their surroundings, form an ecosystem.
- **Barter system:** A trade in which goods are exchanged without the use of money.

Chapter 2 Inside Our Earth

What is Earth?

- The earth comprises three layers: crust, mantle and core.
- Constant changes take place inside as well as outside the earth.

What is the Interior of the Earth?

- The earth is made up of three concentric layers-crust, mantle and core.
- The uppermost layer over the earth's surface is called the crust. It is about 35 km thick on the continental masses and only 5 km thick on the ocean floor. It is made up of silica and alumina and thus called sial.
- The oceanic crust mainly consists of silica and magnesium called sima. Just below the crust is the mantle up to an extent of 2,900 km.
- The innermost layer is the core with a radius of 3,500 km. As it is made of nickel and iron, it is called nife(ni-nickel and fe-ferrous i.e. iron). The central core has a very high temperature and pressure.

Rocks and Minerals

- The earth's crust is made of various types of rocks. Any natural mass of mineral matter that makes up the earth's crust is called a rock.
- There are three major types of rocks; igneous rocks, sedimentary rocks and metamorphic rocks.
- When the molten magma cools, it becomes solid. Rocks thus formed are called igneous or primary rocks. They are of two types, extrusive igneous rocks and intrusive igneous rocks.
- Rocks roll down and break into small fragments and these smaller particles are called sediments. These sediments are transported, compressed and hardened to form layers of rocks. These types of rocks are called sedimentary rock.
- Igneous and sedimentary rocks can change into metamorphic rocks under great heat and pressure. The process of transformation of the rock from one to another is called the rock cycle.
- Rocks are made of different minerals. Minerals are naturally occurring substances which have certain physical properties and definite chemical composition.

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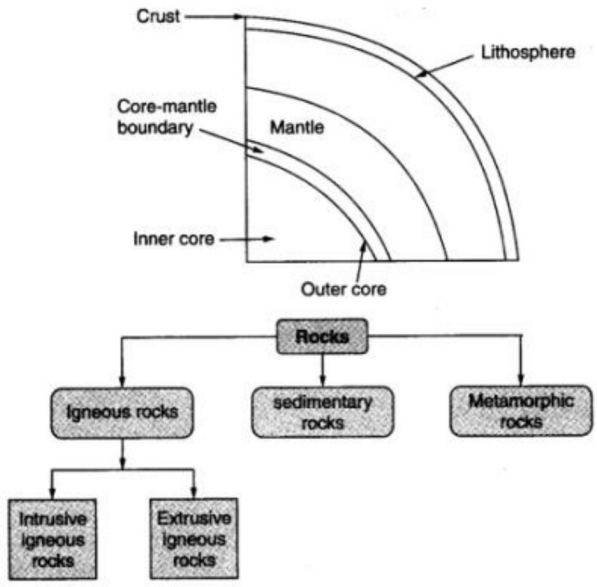

Important Terms:

- **Crust**: The uppermost layer over the earth's surface. It is very thin.
- **Soal:** The continental mass of the crust consisting of silica and alumina is called sial (si-silica and al-alumina).
- **Sima:** The oceanic crust mainly consists of silica and magnesium. It is therefore called sima (si-silica and ma-magnesium).
- **Mantle:** This layer is just beneath the crust. It extends up to a depth of 2900 km. below the crust.
- **Rock:** A rock is a natural mass of mineral matter that makes up the earth's crust.
- **Igneous rock:** These rocks are formed by cooling and solidifying molten magma.
- **Lava:** It is fiery red molten magma coming out from the interior of the earth on its surface.
- **Extrusive igneous rock:** When the molten lava comes on the earth's
- surface, it rapidly cools down and becomes solid. Rocks formed in this way on the crust are called extrusive igneous rocks.
- **Intrusive igneous rock:** When the molten magma cools down deep inside the earth's crust solid intrusive igneous rocks are formed.
- **Sediments:** These are small fragments of rocks.

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- **Sedimentary rock:** When loose sediments are compressed and hardened, layers of rocks are formed. These types of rocks are known as sedimentary rocks.
- **Rock cycle:** The process of transformation of the rock from one to another is known as the rock cycle.
- **Mineral:** Minerals are naturally occurring substances which have certain physical properties and definite chemical composition.

Chapter 3 Our Changing Earth

Lithosphere is broken down into several plates known as the Lithosphere plates. The movement of these plates causes changes on the surface of the earth. The forces that act in the interior of the earth are called endogenic forces, while the forces that work on the surface of the earth are called exogenic forces.

Endogenic force causes earthquakes and volcanic eruptions.

Exogenic force causes weathering, erosion, deposition and gradation. Weathering is the breaking up of the rocks on the earth's crust. Erosion is the breaking away of the landscape by different agents like water, wind and ice.

Sudden movements like earthquake and volcanoes cause most destruction over the surface of the earth.

A volcano is a vent (opening) in the earth's crust through which molten material erupts suddenly.

The vibration in the plates of earth is called an earthquake. The place in the crust where the movement starts is called the focus. The place on the surface above the focus is called the epicenter. It is measured by seismograph and intensity is measured by Richter scale.

Although earthquakes cannot be predicted, the impact can certainly be minimized.

Major Landforms

- The landscapes are continuously worn away by two forces, weathering and erosion.
- Weathering is the breaking down of the rocks on the earth's surface.
- Erosion is the wearing away of the landscape by different agents like water, wind and ice.

Work of a River

- When the river tumbles at a steep angle over hard rocks or down a steep valley side, it forms a waterfall.

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- As the river enters the plain, it twists and turns, forming large bends known as meanders.
- At this point of time, the meander loop cuts off from the river and forms a cut-off called an ox-bow lake.
- During flooding, the river deposits layer of fine soil and other materials called sediments along its banks.
- This leads to the formation of a flat fertile plain called flood plain.
- The raised banks along the river are called levees.
- The collection of sediments from all the mouths forms a delta.

Work of Sea Waves

- The erosion and deposition of the sea waves give rise to coastal landforms.
- Due to sea waves, hollow caves are formed on the rocks.
- They are called sea caves. As cavities become bigger in size, only the roof of the caves remains, thus forming sea arches.
- The erosion further breaks the roof and only walls are left. It is called stacks.
- The steep rocky coast rising almost vertically above seawater is called sea cliff.

Work of Ice

- Glaciers are rivers of ice which erode the landscape by bulldozing soil and stones to expose the solid rocks below.
- The materia] carried by the glaciers, such as big and small rocks, sand and silt get deposited. These deposits form glacial moraines.

Work of Winds

- An active agent of erosion and deposition in the deserts is wind. It makes rocks in shape of a mushroom, called mushroom rocks.
- When the wind stops blowing, the sand falls and get deposited in low hill-like structures. These are called sand dunes.
- When the grains of sand is very fine and light, the wind can carry it over long distances. When such sand is deposited in large areas, it is called **loess**.

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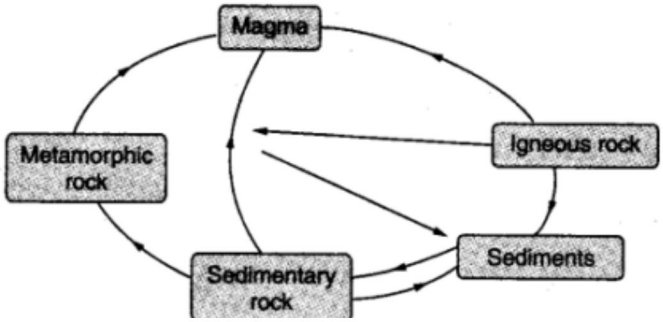

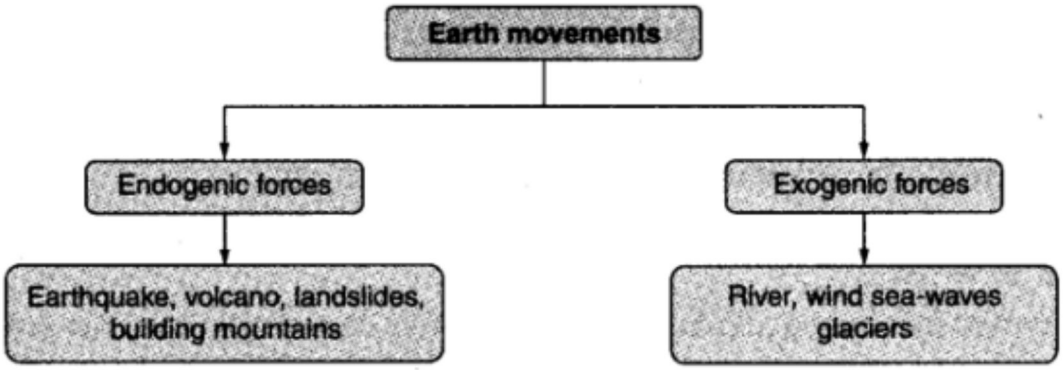

Important Terms:

- **Endogenic forces:** The forces that act in the interior of the earth are called endogenic forces.
- **Exogenic forces:** The forces that act on the surface of the earth are called as exogenic forces.
- **Earthquake:** The vibrations caused by the movement of the lithospheric plates are called earthquakes.
- Focus: The place in the crust where the movement starts is called the
- focus.
- **Epicentre:** The place on the surface above the focus is called the
- epicentre.
- **Weathering:** The breaking up of the rocks on the earth's surface is known as weathering.
- **Erosion:** The wearing away of the landscape by different agents like
- water, wind and ice is called erosion.
- **Waterfall:** A place where a river or stream fails from a high place for
- example over a cliff or rock is known as waterfall.
- **Meander:** Large bends formed by the twisting and turning of a river while entering a plain are known as meanders.

Notes

- **Floodplains:** Floodplains are areas where fine soil and other material get deposited during floods. These are very fertile.
- **Levees:** The raised banks of a river is known as levees.
- **Distributary:** As the river approaches the sea, the speed of the flowing water decreases and the river begins to break up into a number of streams called distributaries.
- **Delta:** It is a triangular area of land where a river has split into many smaller rivers before entering the sea.
- **Sea caves:** Sea caves are hollow like caves formed on the rocks.
- **Sea arches:** When the cavities become very big, only the roof of the caves remains known as sea arches.
- **Stacks:** Further erosion breaks the roof and only wall-like features remain. These features are called stacks.
- **Seacliff:** The steep rocky coast rising almost vertically above seawater is called sea cliff.
- **Beaches:** The sea waves deposit sediments along the shores to form
- beaches.
- **Mushroom rocks:** In deserts, rocks in the shape of a mushroom are very common. These are called mushroom rocks.
- **Sand dunes:** In deserts, when the winds stop blowing, the sand falls and gets deposited in low hill-like structures known as sand dunes.
- **Loess:** When very fine and light grains of sand gets deposited in large areas, it is called loess.

Chapter 4 Air

Our atmosphere is surrounded by a huge blanket of air called atmosphere.

Composition of the Atmosphere

- Nitrogen and oxygen are the two gases which make up the bulk of the atmosphere.
- Carbon dioxide, helium, ozone, argon and hydrogen are found in lesser quantities.
- Apart from these gases, tiny dust particles are also present in the air.

Structure of the Atmosphere

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- Our atmosphere is divided into five layers starting from the earth's surface.
- The first layer is the Troposphere whose average height is 13 km.
- The troposphere is the layer in which the air we breathe exist.
- Almost all weather phenomena occur here.
- The second layer is the Stratosphere which extends up to 50 km.
- The third layer is the Mesosphere which extends up to the height of 80 km.
- The fourth layer is the Thermosphere which extends from 80 km to 400 km.
- The uppermost layer of the atmosphere is Exosphere which has very thin air.

Weather and Climate

- Weather is the Hour-to-hour, day-to-day condition of the
- atmosphere.
- Climate is the weather conditions for a large period and of a large area.

Temperature

- The degree of hotness and coldness of the air is called temperature.
- The temperature of the atmosphere changes not only between day and night but also from season to season, an important factor that influences the distribution of temperature is insolation.
- Insolation is the incoming solar energy intercepted by the earth.
- The amount of insolation decreases from the equator towards the poles.
- Temperature is measured in Celsius and Fahrenheit.

Air Pressure

- Air pressure is defined as the pressure exerted by the weight of air on the earth's surface.
- Horizontally the distribution of air pressure is influenced by the temperature of the air at a given place.
- In areas having a lower temperature, the air is cold.
- The air always moves from high-pressure areas to low-pressure areas.

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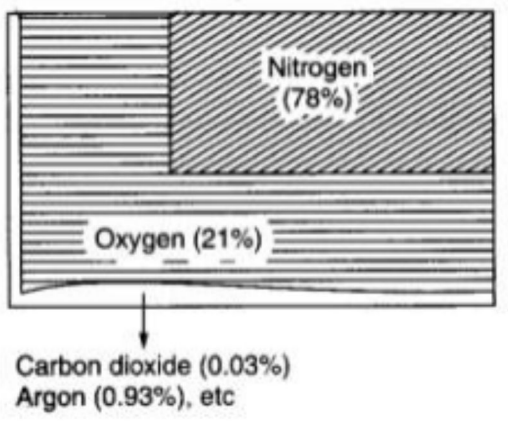
Wind

- The movement of air from high-pressure areas to the low-pressure area is called Wind.
- Winds can be broadly divided into three types: permanent winds, seasonal winds and local winds.
- On 25 October 1999, cyclonic winds originated as depression and affected Odisha killing thousands of people.

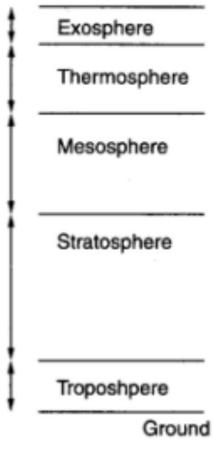
Moisture

- When water evaporates from land and other water bodies, it becomes water vapour.
- Moisture in the air at any time is known as humidity.
- When the water vapour rises, it starts cooling. The water vapour condenses causing the formation of droplets of water.
- When these droplets of water become too heavy to float in the air, they come down as precipitation.
- Precipitation is the falling of moisture in the form of rainfall, snow, fog, sleet and hailstones.
- Based on mechanism, there are three types of rainfall: the convectional rainfall, the orographic rainfall and the cyclonic rainfall.
- Rainfall is very important for the survival of plants and animals.

Constituents of air



Structure of the atmosphere



Important Terms:

- **Atmosphere:** Atmosphere is a thin blanket of air that surrounds the earth.
- **Global warming:** When the temperature of the earth's atmosphere

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- increases due to the increases in carbon dioxide, it is known as global warming.
- **Weather:** The hour-to-hour, day-to-day condition of the atmosphere is known as weather.
- **Climate:** The average weather condition of a place for a longer period of time is known as the climate of a place.
- **Temperature:** The degree of hotness and coldness of the air is known as temperature.
- **Isolation:** Isolation is the incoming solar energy intercepted by the earth.
- **Air pressure:** The pressure exerted by the weight of air on the earth's surface is known as air pressure.
- **Wind:** Wind is the movement of air from the high-pressure area to low pressure areas.
- **Moisture:** Water vapour present in the atmosphere is known as moisture.
- **Humidity:** Moisture in the air is known as humidity.
- **Cloud:** It is a mass of water droplets.
- **Precipitation:** Falling of water on the earth in the form of rainfall is
- known as precipitation.
- **Thermometer:** It is an instrument that measures temperature.
- **Barometer:** It measures atmospheric pressure.
- **Rain gauge:** It measures the amount of rainfall.
- **Wind vane:** It shows the direction of the wind

Chapter 5 Water

3/4th of earth's surface is covered by water, so the earth is called the blue planet.

The sun's heat causes evaporation of water vapour. When the water vapour cools down, it condenses and forms clouds. From there, it may fall on the land or sea in the form of rain, snow or sleet.

The process by which water changes its form and circulates between oceans, atmosphere and land is known as the water cycle.

Our earth is like a terrarium.

The major source of fresh water are the rivers, ponds, springs and glaciers.

Notes

The ocean bodies and the seas contain salty water.

Distribution of Water on Earth

- About three-fourths of the earth's surface is covered by water.
- On earth 97% of water is saline and 3% of water is fresh water.
- The following table gives the distribution of water in percentage
- Water is absolutely essential for survival.

Movements

- Unlike the calm water of ponds and lakes, ocean water keeps moving continuously.
- The movements which occur in oceans are of three types: waves, tides and currents.

Waves

- When the water on the surface of the ocean rises and falls alternately, they are called waves.
- An earthquake, a volcanic eruption or underwater landslides can shift large amounts of ocean water.
- As a result, huge tidal wave may be formed which is called tsunami.
- Tsunami in South and South-East Asian coast had caused havoc in December 2004.

Tides

- The rhythmic rise and fall of ocean water twice in a day is called a tide.
- Tides are of two types: spring tides and neap tides.

Ocean Currents

- Ocean currents are streams of water flowing constantly on the ocean surface in different directions.
- Ocean currents are of two types, warm and cold.
- The Labrador Ocean current is a cold current, while the Gulf Stream is a warm current.

Important Terms:

- **Waves:** When the water on the surface of the ocean rises and falls
- alternately, they are called waves.
- **Tsunami**: Tsunami is a huge tidal wave.

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- **Tide:** Tide is the rhythmic rise and fall of ocean water that occurs twice in a day.
- **Springtide:** During the full moon and new moon days, the sun, the moon and the earth are in the same line and the tides are highest. These tides are called spring tides.
- **Neap tide:** When the moon is in its first and last quarter, the ocean waters get drawn in diagonally opposite directions by the gravitational pull of sun and earth resulting in low tides. These tides are called neap tides.
- **Ocean currents:** These are streams of water flowing constantly on the ocean surface in definite directions.

Chapter 6 Natural Vegetation and Wildlife

Natural vegetation means the plants that grow naturally without human interference.

Natural vegetation can be categorised into three categories namely; forest, grassland and desert.

The change in the type of natural vegetation occurs mainly because of the changes of climatic conditions.

Forests

- Forests grow where temperature and rainfall are plentiful to support a tree cover.
- Forests are of six types: Tropical Evergreen, Tropical Deciduous, Temperate Evergreen, Temperate Deciduous, Mediterranean Vegetation, and Coniferous forests.
- Tropical Evergreen Forests are those which occur in the region near the equator and close to the tropics.
- Tropical Deciduous Forests are monsoon forests which shed their leaves in the dry season to conserve water.
- Temperate Evergreen Forests are in the mid-latitudinal coastal region.
- Temperate Deciduous Forests are those which shed their leaves in the dry season.
- Mediterranean Vegetation is found around the Mediterranean Sea in Europe.
- Coniferous Forests are found in areas along the Taiga.

Grasslands

Notes

- Grasslands are found in the regions of moderate rainfall. They are of two types—Tropical Grasslands, which have tall coarse grass, and Temperate Grasslands.
- Tropical Grasslands occurs on either side of the equator and extend till the tropics. Tropical Grassland of Africa is called Savannah.
- Temperate Grasslands are in mid-latitudes and are called prairies, steppes, etc. The grass is usually short here.

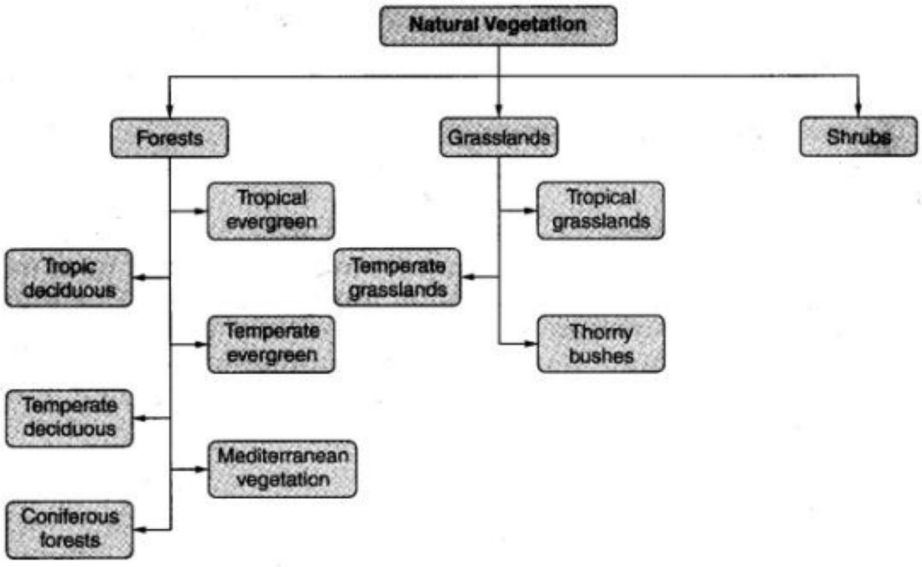
Thorny Bushes

- Thorny bushes are found in the dry desert-like regions.
- These are found in areas with scanty rain and scorching heat.

Tundra Vegetation

- Mosses, lichens and very small Shrubs are found in cold regions. This is called tundra type vegetation. It is found in polar areas.
- Trees, grass, lichen, mosses, etc. that grow naturally without human interference constitute natural vegetation. The growth of natural vegetation depends on temperature and moisture. It also depends on factors such as slope and thickness of soil.

Important Terms:



- **Natural vegetation:** Trees, grass, lichens, mosses, etc. that grow naturally without the interference of human beings are called natural vegetation.
- **Forests:** They grow where temperature and rainfall are plentiful to support a tree cover. Forests may be dense and open.
- **Grasslands:** They grow in the region of moderate rain.

Notes

- **Shrubs:** These consists of thorny shrubs and scrubs.
- **Anaconda:** It is one of the world's largest snakes found in the tropical rainforest. Taiga. It means pure or untouched in the Russian language

Chapter 7 Human Environment – Settlement

Transport and Communication

Human beings are dependent on the environment. To grow food, build homes and develop better means of transport and communication, human beings have modified the environment.

Settlements

- Settlements are places where people build their homes.
- The settlements earlier grew near the river valleys as the water was easily available and the land was fertile.
- Settlements can be permanent or temporary.
- Settlements which are occupied for a short time are called temporary settlements.
- In permanent settlements, people build homes to live in.
- Settlements can be rural or urban. Rural settlements can be compact or scattered.
- People in rural areas practice agriculture. In the urban area, people are mostly engaged in services.

Transport

- Transport is how people and goods move. With the invention of the wheel, transport became easier.
- Earlier donkeys, mules, bullocks and camels were used for transportation.
- Earlier traders took the land route or sea route for transportation.
- Now it takes only 6-8 hours to travel from India to Europe.

The four major means of transport are roadways, railways,

waterways and airways.

Roadways: The most commonly used means of transport, especially for short distances, are roads. They can be metalled or unmetalled.

Railways

- Railways are the fastest means of land transport and can carry bulky materials over a long distance.

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- The railways carry people over long distances quickly and economically.
- The invention of the steam engine and the industrial revolution helped in the speedy development of rail transport.
- Diesel and electric engine have largely replaced the steam engines.
- Now superfast trains have been introduced to make travelling faster.
- Indian Railways network is the largest in Asia.

Waterways

- Waterways are the cheapest means of transportation for carrying heavy and bulky goods over long distances.
- There are mainly two types of routes, inland waterways and sea routes.
- Navigable rivers and lakes are used as inland waterways.
- Sea routes are connected through ports.

Airways

- Airways are the fastest and most expensive mode of transport.
- It is the only mode of transport to reach the most remote and distant areas especially where there are no roads and railways.
- Some major airports in the world are Delhi, Mumbai, New York, London, Paris, Frankfurt and Cairo etc.

Communication

- Process of conveying the message to others is known as communication.
- Different modes of communication are used to provide information, to educate as well as to entertain.
- Communication is of two types namely, personal and mass communication.
- Through newspaper, radio and television, we can communicate with many people. They are, therefore, called mass media.
- Satellites, Internet, Wireless telephone are the main modes of communication.

Important Terms:

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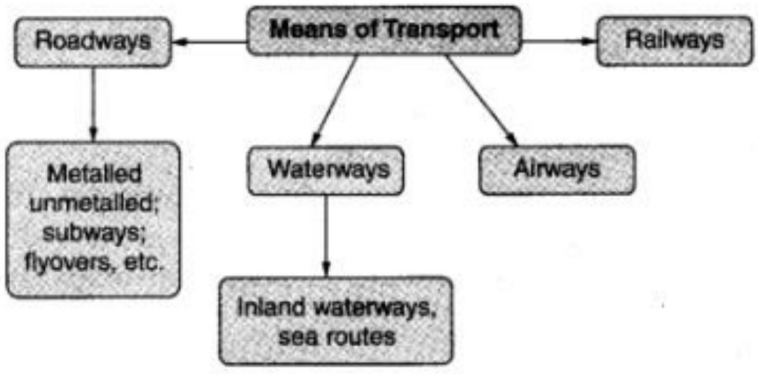

- **Settlement:** It refers to a place where people build their homes.
- **Site:** It refers to a place where a building or a settlement develops.
- **Transhumance:** It is a seasonal movement of people.
- **Compact settlement:** It is a closely built area of dwellings.
- **Scattered settlement:** When dwellings are spaced over an extensive area.
- **Transport:** It is the means by which people and goods move from one place to another.
- **Metalled roads:** These are pucca roads and are used in all the weather.
- **Unmetalled roads:** These are Kutcha roads. They are out of work during the rainy season.
- **Subways:** Underground roads are called subways.
- **Flyovers:** These are built over raised structures.
- **Communication:** The process through which we convey messages to others.
- **Mass Media:** Newspapers, radio and television are called mass media because they communicate with a large number of people at the same time.

Chapter 8 Human Environment Interactions – The Tropical and the Subtropical Region

Human beings interact with the environment and are dependent on it for several things.

Life in the Amazon Basin

- The Amazon River Basin lies near the equator.
- Amazon river was discovered by a Spanish explorer, Vicente Yanez Pinzon.

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- The Amazon basin lies in the tropical region close to the equator between 10°N and 10°S, and the river Amazon flows through this region.
- The Amazon River basin drains portions of Brazil, parts of Peru, Bolivia, Ecuador, Columbia and a small part of Venezuela.

Climate

- The Amazon basin stretches directly on the equator and is characterized by hot and wet climate throughout the year.
- There are heavy rainfall and high humidity.

Rainforest

- As it rains heavily, thick forests grow in this region.
- The forests are in fact so thick that the dense roof created by leaves and branches do not allow the sunlight to reach the ground.
- The rainforest is rich in flora and fauna.
- The basin is home to thousands of species of insects.
- People of the Rainforests People grow most of their food in small areas after clearing some trees in the forest.
- Slash and burn agriculture is prevalent. The development activities are leading to the gradual destruction of the biologically diverse rainforest.

Life in the Ganga-Brahmaputra Basin

- The tributaries of rivers Ganga and Brahmaputra together form the Ganga- Brahmaputra basin in the Indian subcontinent.
- The plains of the Ganga and the Brahmaputra, the mountains and foothills of the Himalayas and the Sunderbans delta are the main features of this region.
- The Ganga and Brahmaputra rivers together form the largest delta in the world.
- The basin area has varied topography. The mountain areas with steep slopes have inhospitable terrain.
- Agriculture is the main occupation of the people were flat land is available to grow new crops.
- Wheat, maize sorghum, gram and millets are the important crops of the region.
- The vegetation cover of the area varies according to the type of landforms.

Notes

- There is a variety of wildlife in the basin. In the delta areas, Bengal tiger, crocodiles and alligators are found.
- Fish and rice is the staple diet of the people.
- The Ganga-Brahmaputra plain has several big towns and cities like Allahabad, Kanpur, Varanasi, Lucknow, Patna and Kolkata.
- All four means of transport are well-developed in the Ganga Brahmaputra Basin.
- Tourism is an important activity in the region.

Important Terms:

- **Mouth:** The place where a river flows into another body of water is
- known as the river's mouth.
- **Tributaries:** These are small rivers that join the main river.
- **Bromeliads:** These are special plants that store water in their leaves.
- **Slash and Burn Agriculture:** It is a type of cultivation in which farmers clear a patch of land by cutting down trees and bushes. These are then burnt which releases the nutrients into the soil. Now the field becomes ready for growing crops.
- **Manioc:** This is the staple food of the people of the Amazon basin.
- **Maloca:** Large apartment like houses with steeply slanting roofs are called malocas.
- **Population Density:** It refers to the number of persons that live in one sq. km. of area.
- **Terrace Farming:** It is a type of farming in which terraces are built on steep slopes to create flat surfaces on which crops are grown. The slope is removed so that water does not run off rapidly.
- **Piranha:** It is a type of fish that eats flesh.

Chapter 9 Life in the Temperate Grasslands

Grassland is a region where grasses from the dominant type of plant life. Depending upon the climate conditions, grasslands can be divided into two categories, the Temperate Grasslands and the Tropical Grasslands.

The Prairies

Notes

- Prairies are the Temperate Grassland found in North America. They are bound by the Rocky Mountains 'the West and the Great Lakes in the East.
- For the most part, Prairies are tree-less but, near the low-lying area's woodlands can be found. The prairies are bound by the Rocky Mountains in the West and the Great Lakes in the East.
- Prairies cover major parts of the USA and Canada.

Climate

- Climate is of continental type with extreme temperature ie with warm summers and very cold winters.
- The annual rainfall is moderate and is ideal for the growth of grass.

Flora and Fauna

- Prairies are practically tree-less but the places where water is available, trees such as willows, alders and poplars grow.
- Places that receive rainfall of over 50 cm, are suitable for farming as the soil is fertile.
- The prairies are known as the 'Granaries of the world' because surplus wheat is produced here.
- Bison or American buffalo is the most important animal.

People

- Large-scale cattle farms called ranches are looked after by the sturdy men called cowboys.
- Large scale farming with modern technology is done here.

The Velds

- The Temperate Grasslands of South Africa are called the velds.
- Velds are rolling plateaus with varying heights ranging from 600 m to 1100 m.
- It is bound by the Drakensberg Mountains on the east.

Climate

- The welds have a mild climate due to the influence of the Indian Oceans.
- Here the summers are short and warm.
- The velds receive rainfall mainly in the summer months from
- November to February.
- Winters are cold and dry. Temperature varies between 5°C and 10°C and July is the coldest month.

Notes

Flora and Fauna

- Vegetation cover is sparse.
- Red grass grows in bush velds.

People

- Velds are known for cattle rearing and mining.
- The main crops are maize, wheat, barley, oats and potatoes.
- The velds have a rich reserve of minerals.
- Iron and steel industry has developed where coal and iron are present.
- Johannesburg is known as the gold capital of the world.
- Grassland is a region where grasses form the dominant type of plant life.

Important Terms:

- **Grassland:** A region where grasses form the dominant type of plant life.
- **Prairie:** The word prairie has been originated from Latin word priata which means meadow.
- **Red Indians:** native Americans.
- **Chinook:** It is a hot wind that blows in winter and therefore raises the temperature within a short time.
- **Ranches:** They are large cattle farms.
- **Bison:** The American buffalo.
- **Cowboys:** The sturdy men who look after the ranches.
- **Combine:** A single machine which can combine the tasks of sowing,
- ploughing and threshing, i.e., a three-in-one.
- **Veld:** Velds are the temperate grasslands of South Africa.

Chapter 10 Life in the Deserts

Deserts are characterised by low rainfall, scanty vegetation and extreme temperatures. Depending on the temperature, there can be hot deserts or cold deserts.

The Hot Desert – Sahara

- The Sahara Desert in Africa is the world's largest hot desert.
- It touches 11 countries and has got gravel plains and elevated plateaus with a bare rocky surface.

Notes

- The climate of Sahara is scorching hot and parched dry with temperature as high as 50° C.
- The nights are freezing cold with the temperature nearing zero degrees.
- Vegetation in the Sahara Desert includes cactus, date palms and acacia. Camels, hyenas, jackals, foxes, scorpions, snakes and lizards are the main animal species found here.
- Despite its harsh climate, Sahara is inhabited by various groups of people. The main groups are Bedouins and Tuaregs.
- The oasis in the Sahara and the Nile Valley in Egypt supports the settled population.
- The discovery of oil is constantly transforming this region. Other important minerals found here are iron, phosphorus, manganese and uranium.
- More and more nomadic tribes are taking to city life.

The Cold Desert – Ladakh

- Ladakh is a cold desert lying in the Great Himalayas, on the eastern side of Jammu and Kashmir.
- The altitude in Ladakh varies from 3,000 m in Kargil to more than 8,000 m in the Karakoram.
- The area experiences freezing winds and burning hot sunlight.
- Due to high aridity, the vegetation is sparse. Groves of willows and poplars are seen in the valleys.
- The animals of Ladakh are wild goats, wild sheep, yak and special kinds of dogs.
- The animals are reared as they provide milk, meat and hides.
- The population consists of either Muslims or Buddhists. Some famous Buddhist monasteries are Hemis, Thiksey, Shey and Lamayuru.
- In the summer season, the people are busy cultivating barley, potatoes, peas, beans and turnips.
- Tourism is a major activity with several tourists streaming in from within India and abroad.
- People of Ladakh have over the centuries learnt to live in balance and harmony with nature.
- Pashmina wool of this region is famous. Leh and Kargil are the main towns in Ladakh.

Important Terms:

Notes

- **Desert:** It refers to an arid area characterised by extremely high or low temperatures with poor vegetation.
- **Oasis:** It is an area in the desert where there is water and where plants grow.
- **Shahtoosh:** It is kind of wool obtained from Chiru or the Tibetan antelope.
- **Gangri:** It is a glacier found in Ladakh.
- **Tuaregs:** These are nomads of the Sahara Desert.
- **Bedouins:** These are nomads of the Sahara Desert.
- **Khapa-chan:** Ladakh is also known by this name. It means snow land.