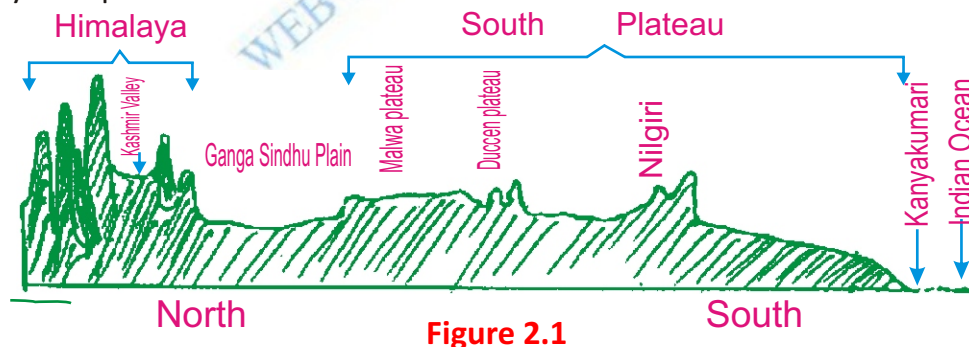


Chapter-2

PHYSICAL FORM : STRUCTURE & RELIEF

Our country has a vast region, because of which we find variations in its physical forms. In some regions, we find high mountain ranges whereas at other regions, there are plateaus and large plains. In this way, various land forms have developed here, which are not similar at all places. The high mountain ranges at some regions are covered with snow and at some regions with dense forests. Similarly, rivers also form rugged surfaces by cutting various plateau regions. They also affect plain regions which we can roughly see in figure 2.1.

The present physical form of India has taken millions of years to develop. In this long process, the geological activities below Earth crust as well as external forces such as weathering, erosion and deposition have played important role.



Geologists have tried to explain the formation of physical structure of India. There are various theories in this context, but at present majority of geographers have accepted the 'Plate Tectonic Theory'. According to this theory, Earth crust is divided into various plates. Peninsular Plateau of India for example is a part of one plate.

In 1965, Tuzo Wilson used the word 'Plate Tectonic', however W.J. Wilson firstly proposed the theory of Plate tectonic. According to this theory, the earth's outer crust is made up of six large plates and nine small plates.

Large Plates: 1. Indo-Australian Plate, 2. African Plate, 3. American Plate, 4. Eurasian Plate, 5. Pacific Plate, 6. Antarctic Plate

Small Plates: 1. Arabian, 2. Philippine, 3. Juan de Fuca, 4. Cocos, 5. Nazca, 6. Scotia, 7. Caribbean, 8. Somalia, 9. Bismarck

Plates form solid earth crust and between two plates the formation of plate boundary or tectonic takes place.

Peninsular plateaus are one of the oldest parts of earth crust. This part represents the oldest land form which never submerged in ocean. It means it is the most primitive, tough and fundamental part of India. High pressure and tension get created in the inner and outer surface of earth crust due to the movement of plates which leads to folds, faults and volcanic activities.

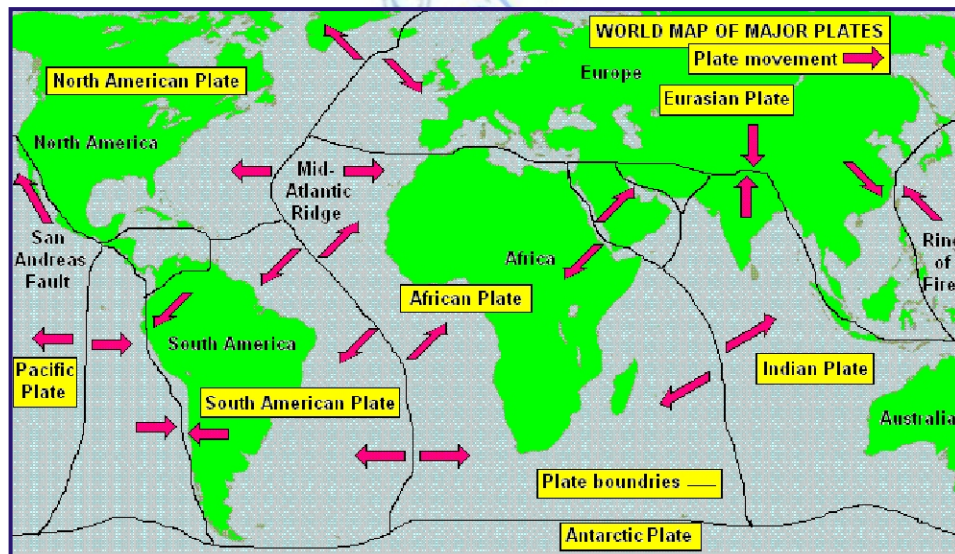


Figure 2.2: Major plates of Earth Crust

Broadly, the movement of the plates creates three types of tectonic boundaries: **convergent**, where plates move into one another; **divergent**, where plates move apart; and **transform**, where plates move sideways in relation to each other. Due to the movements, happening in these plates during millions of years, there has been a change in the position and shape of continents. The fundamental development of present land forms of India is a result of these movements.

Earth came into existence around five billion years ago. The age of Earth can be divided into four Eras: 1. **Azoic Era** 2. **Paleozoic Era** 3. **Mesozoic Era** 4. **Cenozoic Era**. These Eras have been further divided into periods. Pre Cambrian has the longest time period, from Earth's evolution to till fifty five crore years ago from now.

Twenty crore years ago, India was extreme far in southern hemisphere which was a part of Gondwana land. India, Australia, Africa and South America formed the major parts of Gondwana land. Converging currents have divided earth crust into several parts. Indian plate got separated from Australian plate and moved towards north direction which then collided with the larger 'Eurasian plate'. In this way about 7 crore years ago, there was a collision between the two plates which led to the folding of sedimentary rocks at 'Tethys' sea which was situated between them. Because of this collision, Asian mountain ranges have developed and whose development still continues.

The movement of plates near Arctic tectonic boundary is 2.5 centimeters and in Pacific.

Initially, there was only one supercontinent called as Pangaea. Its northern part is termed as 'Angara Land' whereas the southern part is termed as 'Gondwana Land' and there was 'Tethys sea' between these two land parts. Peninsular plateau of India is the part of Gondwana land and is the actual basis of Indian land.

Due to uplift of the Himalaya and down fold of the remaining parts of Tethys sea and deposition of sediments, a large basin was formed. Along with this, sedimentary deposition was also led by rivers of Southern plateaus. In this way, flat surfaced land areas were developed which is called the Great Plain of India.

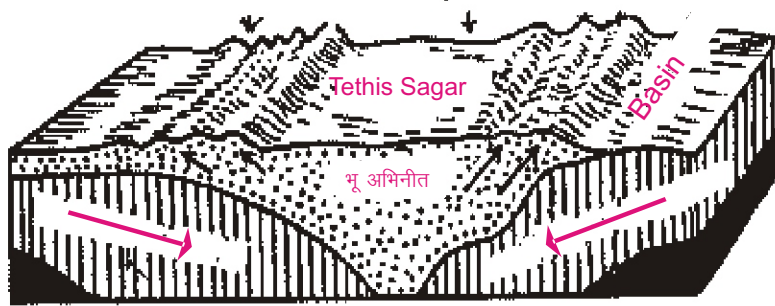


Figure 2.3: Formation of Young fold mountains

Coastal plains were developed due to sedimentary depositing brought by the rivers through plateaus and sea-tides. Andaman Nicobar islands are the residual of submerged mountains whereas Lakshadweep is formed by coral deposition.

Out of the total land area of India, 11% is mountain part, 28% is plateau, 18% is hilly region and 43% is plain regions. The average height of mountain and plateau region is between 300-900 meters. Contrary to this, plains and coastal regions have an average height of less than 160 meters. The average height of the northern mountain ranges is 1200 meters to 6000 meters. There are some mountains in this region having height more than 8000 meters and most of them are covered with snow throughout the year. Folds and faults are formed here due to pressure. Various valleys of Himalayas have been formed due to the lake deposition. *Wular* and *Dal* lake in Kashmir are the evidence of this in the form of remains. In the middle of Himalayan highlands, also called Himachal, there are deep gorges of more than 1000 meters through which several rivers flow. On the south of the middle Himalaya, there is Sivalik which also has several important valleys.

The Himalaya evolves from Pamir and move towards east. Then it takes a turn towards south by making an angle. After passing Brahmaputra

river it turns towards south where it is expanded as Patkai hills (Arunachal Pradesh), Naga hills (Nagaland), Manipur hills and Lushai hills (Mizoram). These are also known as Purvanchal range of hills. There are several small and large glaciers in the Himalayan region. The major glaciers are Gangotri, Yamunotri, Siachen, Baltoro, Biako and Batura. There are also several passes here, such as *Zoji la* and *Burzil* in Jammu and Kashmir, *Bara-Lach la* and *Shipki la* in Himachal Pradesh, *Thag la* in Uttarakhand, *Nathu la* and *Jelep la* in Sikkim.

In the south of northern mountain region, there is Great Plain which is formed by the sediment deposition of Ganges, Indus and Brahmaputra and their tributaries. Due to the emergence of Aravalli mountain ranges in the middle of this plain, Indus and its tributaries such as Jhelum, Chenab, Ravi, Beas and Sutlej flow towards west, whereas Ganges and its tributaries such as Yamuna, Gandak, Ghaghara, Saryu, Kosi, Mahananda, Son, etc. flow towards east. In this way, Aravalli mountain ranges acts as a water divider. The southern part of India is plateau region where many mountains exist in the north east and the west region. The average height of this region is 500 to 750 meters. Narmada river divides the plateau region into two parts. In the south of Satpura range, there is valley of Tapi river. Narmada and Tapi form narrow alluvial plain. Both these rivers flows through fault valley. On the northern end of this plateau region, there is Vindhya mountain range. There are also many mountains in the east and west of peninsular plateau. There is Western Ghat in the west which is also known as Sahyadri. Three major passes are here which are known as Thalghat, Bhorghat and Palghat. The Eastern Ghat mountains are discontinuous. Mahanadi, Godavari, Krishna and Kaveri flow through Eastern Ghat and form fertile plain. The major hills of Eastern Ghat are Mahendragiri in Odisha, Nallamala in Andhra Pradesh, Annamalai, Pachamalai, Palani, Yelagiri hills in Tamil Nadu.

Coastal Plains have developed on the eastern and western side of Deccan plateau. In the west, this plain is narrow and discontinuous whereas broader and flat in the east. The Rann of Kutch is formed due to upliftment in sediment deposition by sea.

There are dry lands on the north of the Great Plains which is also called the desert of Rajasthan. This is a part of Thar desert. You may find many sand dunes here. A dune is a mound of sand formed by the wind, usually along the beach or in a desert. Dunes are formed when wind blows sand into a sheltered area behind an obstacle. Dunes grow as grains of sand accumulate. Every dune has a windward side and a slip face. A dunes windward side is the side where the wind is blowing and pushing material up. A dunes slip face is simply the side without wind. A slip face is usually smoother than a dunes windward side. The height of these dunes ranges from 120 to 150 meters.

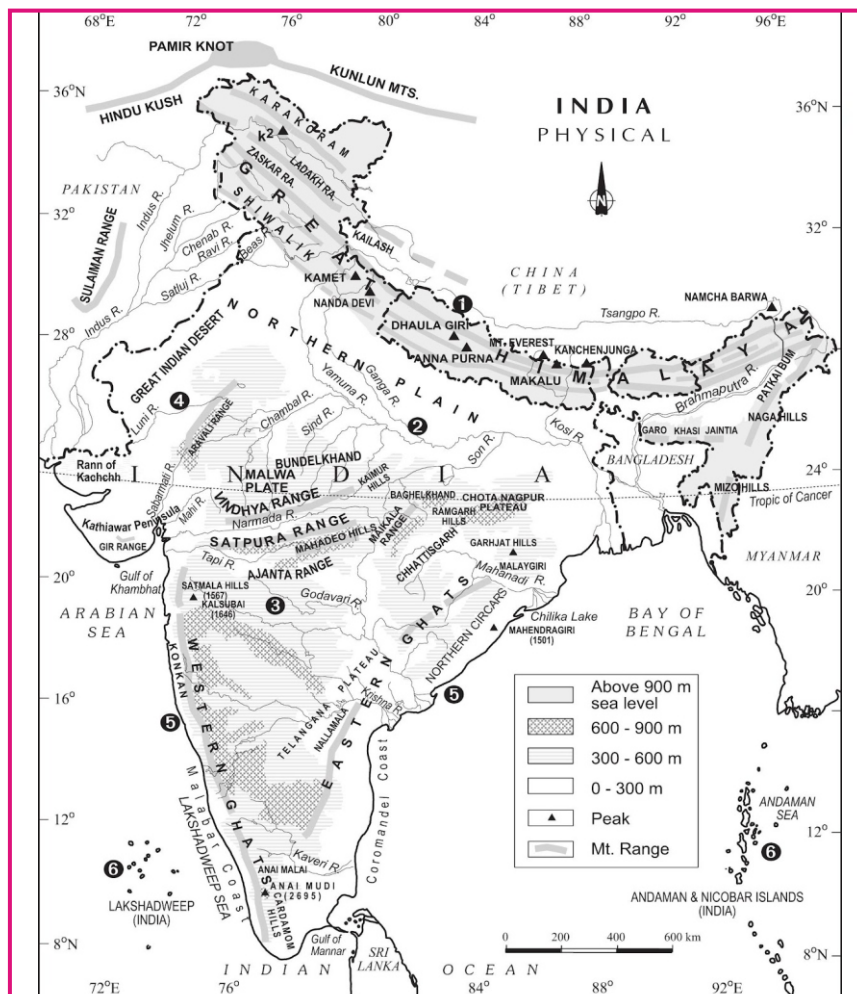


Figure 2.4: India- Major Geographical division

Physical Division- On the basis of physical features, India can be divided into following six divisions:

- i. The Himalayan mountain ranges
- ii. The Great Plains of Northern India
- iii. The Peninsular Plateau
- iv. The Coastal Plains
- v. The Indian Desert
- vi. The Islands.

i. The Himalayan mountain ranges

The Himalayas are the young fold mountains located along the northern boundaries of India. The Himalayas are the climatic barriers between India and the central Asia. They spread from west-east direction from Indus to Brahmaputra for 2500 km in arc shape. The Himalayan ranges cover around 5 lac square kilometres of area. Their width varies from 160 km in Arunachal Pradesh to 500 km in Kashmir. The eastern part has more height variations in comparison to the western part. Longitudinally, the Himalayas may be divided into the parallel ranges: Greater Himalayas or *Himadri*, Lesser Himalayas or *Himachal*, and Outer Himalayas or *Siwaliks*.

Some mountain peaks of Himalayas

Peak	Country	Height (Meters)
Mount Everest	Nepal	8,848
Mount Godwin Austin (K2)	India	8,611
Kanchenjunga	India	8,598
Makalu	Nepal	8,481
Dhaulagiri	Nepal	8,172

Nanga Parvat	India	8,124
Annapurna	India	7,817
Kamet	India	7,756
Namcha Barawa	India	7,756
Gurla Mandhata	Nepal	7,728

The Greater Himalayas or Himadri- The Greater Himalayas comprises the northern most ranges and peaks. It has an average height of 6100 metres and its width lies between 120 and 190 Kms. It is the most continuous range. It is snow bound and many glaciers are descend from this range. It has high peaks such as Mt. Everest, Kanchenjunga, Makalu, Dhaulagiri, Nanga Parbat etc. High Mountain passes also exist in this range, namely, Bara Lacha La, Shipkila, Nathu La, Zelepla etc. Zaskar range is also part of the Greater Himalayas. Ladakh mountain range lies on the north of Zaskar range. Karakoram mountain range is situation on the north of Himalaya and is called Trans-Himalaya. K2 (8611 km) is located here which is the second highest peak of the world. It is also known as mount Godwin Austin or *Gaurinanda Parvat*.



Figure 2.5: Himalayas

The Lesser Himalayas or Himachal- Another horizontal Himalayan range called lesser Himalayas or Himachal is situated in the south of the Greater Himalayas. It is the most discontinuous range of Himalayas which is made up due to high compression.

Punjab: It is a Persian word. 'Punj' means Five and 'ab' means Water. It means a 'region with five rivers'.

The altitude of this range lies between 1800 and 4500 metres and the average width is 50KM. A few peaks of this range have height above 5000 meters. Rivers form George up to 1000 meters depth. There is snow fall during winters for 3-4 months in these regions whereas the summers are pleasant and good for health. The prominent ranges in this region are Pir Panjal, Dhauladhar and Mahabharata ranges. It comprises many famous hill stations such as Shimla, Mussoorie, Nainital, Darjeeling, etc. It also comprises famous valleys such as Kashmir, Kullu, Kangra etc. All mountain ranges are covered with dense Evergreen forests and also have grasslands which are called as 'marg' in Kashmir (for example: Gulmarg, Khilanmarg and Sonmarg).

The Outer Himalayas or the Siwaliks- The southernmost range of Himalayas is called outer Himalayas or Siwaliks. It is the outer most range of the Himalayas which starts from Potwar Plateau region in the west and continues till Tista river in the east. It is the youngest part of the Himalayas. The altitude varies between 900-1500 meters with average height of 1200 meters. The width lies between 10-50 km. They have low hills such as Jammu hills, Miri hills, Mishmi hills etc. The valleys lying between Siwalik & Lesser Himalayas (Himachal) are called Duns like *Dehra Dun*, *Kotli Dun* and *Patli Dun*. The north-west hilly region of West Champaran District in Bihar is the part of Himalayan Siwaliks range. It covers about 856 square kilometres of area in Bihar and is known as Someshwar Hills.

The Himalayas can also be divided on the basis of regions from East to West. The river Brahmaputra marks the eastern most boundaries of Himalayas and Indus river as the western most boundary.

The regional classification of Himalayas is:

- **Kashmir Himalayas**-They lie between river Indus and Sutlej
- **Kumaon Himalayas**-They lie between Sutlej river and Kali river. This region comprises is from lakes such as Nanital, Bhimtal and Nankuchiatal, etc.
- **The Nepal Himalayas**-This stretch is from Kali to Tista. They consist of highest peaks of the world such as Mt. Everest, Dhaulagiri, Annapurna, Makalu, etc.
- **The Assam Himalayas**-This region extends from Tista to Dihang (Brahmaputra). It consists of several hills such as Mizo, Naga, Garo, Khasi, Jaintia etc. They are also known as Purvanchal hills.

As you know that Brahmaputra river forms the eastern most boundary of the Himalaya. After Dihang Gorge, it takes a sharp turn towards south and spread along eastern border line of India. It is also known as Purvanchal hills or Eastern Hills. These hills are in the north east States of India. Patkai hills (Arunachal Pradesh), Naga hills (Nagaland), Manipur hills and Lushai hills (Mizoram) are situated here. The southern slope of the Himalaya is very sharp in comparison to its western slope. Therefore, glaciers have been created more on northern slope than the southern slope.

ii. **The Great Plains of Northern India**

The Northern Plains are located between the Himalayas in the north and the peninsular plateau in the south. It is formed by the deposition of the sediments brought by three main river systems namely the Indus, the Ganga and Brahmaputra and their tributaries. The Northern plain spreads over an area of seven lakh sq. Km and is highly populated. It stretches about 2400 Km from east to west. Its width varies between 150-500 Kms. The northern plain spreads mainly in the states of Punjab, Haryana, Uttar Pradesh, Bihar and West Bengal. The alluvial soil here is rich in nutrients and hence good for cultivation. The great plain is maximum 240 meters above the sea level. The Western part of the Great plain has slope towards south-west from north-east and Eastern part has slope towards south-east from north-west.

The Great Plain can be broadly divided into four subparts:

Plains of the Punjab (Western Part): It is made up by Indus river and its

tributaries. Its maximum region is in Pakistan. Western part of Haryana and Punjab of India, is also included in this part. Jhelum, Chenab, Ravi, Beas and Sutlej are the major tributaries of this region which originate from Himalaya. The region between Ravi and Beas rivers is called as '*Upper Bari doab*', whereas '*Bist doab*' is formed by Beas and Sutlej rivers.

Plains of Rajasthan (South western Part): The average **its** height of this plain is from 150-300 meters and its normal slope is towards south-west from north-east. Its expansion is in the west of Aravalli ranges. It is basically semi-arid or dry region. Sand dunes are major landforms here. In the eastern part, there are many hills which are called '*Tor*'. Luni is the major river of this part which extends up to Rann of Kutch in rainy seasons. There are several famous salt water lakes in this part such as Sanvar, Degna, Didwana and Kuchapan.

Plains of Ganga (Central Part): It expands from Yamuna river to the western border of Bangladesh. It is about 1,400 km long from Ghaggar to Tista river. The slope of this region is generally towards north-west from south-east. This plain spreads mainly in the states of Uttar Pradesh, Bihar, West Bengal and some parts of Jharkhand. This can be further divided into three subparts: **Plain of Upper Ganga** (the region between Delhi and Allahabad), **Plain of Central Ganga** (the region between Allahabad and Farakka) and **Plain of lower Ganga** (delta region and West Bengal).

Except the north-west part of Siwalik range and a few hills in southern part, the major part of Bihar is formed by the alluvial soil brought by Ganga and its tributaries. Here, the plain of Ganga is divided into two parts: the Northern plain of Ganga and the Southern plain of Ganga. Gandak, Budhi Gandak, Bagmati, Kamala, Kosi and Mahananda are the major rivers in the northern plain. Kosi is called as '*Sorrow of Bihar*' due to its flood consequences. The flood also forms residual lakes, marshy lands (*daldal*), etc. In the southern plain of Ganga, the major rivers are Son, Punpun, Falgu and Chanan. These rivers generally become dry in summer seasons. The low land is called as '*Jalla*' and '*Taal*' here. These are also the regions of new Alluvial soil.

Plains of Brahmaputra (Eastern Part): Its expansion is about 650 kilometres from the north-east of Sadia in Assam to Dhuwari land. It is surrounded by hills from all sides except western part. The gradual slope of this region is from north-east to south-east. Brahmaputra river flows between this region and *Majoli* island situated in the middle of this river is world's largest river island.

On the basis of physical features, the Great plain has been divided into four parts. A 8-16 km width region belt is formed with the deposition of small pebbles and stones at the mountain bed when we come down from Siwalik slope. This deposition is called '*Bhabar*'. Small rivers get extinct here. On the south of this region belt, rivers again get emerged which lead to the formation of wet and marshy lands, called as lowlands or '*Taraai*'. There are tall grasses and dense forests in this region with rich wildlife.

The high lands formed due to the deposition of rivers in Gangetic plains, are out of the reach of flood water. These are called '*Bangar*'. Limestone deposition is also found in the soil of this region. The low plain, where flood water reaches every year and causes sediment deposition is called as '*Khadar*'. Each year, the soil in *Khadar* region is renewed; therefore it is very fertile and ideal of extensive cultivation.

iii. The Peninsular Plateau

It is a triangular shaped land and part of primitive Gondwana land. It is wider in the north and narrow in the south. The average height of this land is about 600-900 meters. Aravalli, Vindhya and Satpura ranges are situated in the west of peninsular plateau. The western slopes of the plateau are higher than the eastern part. The Western Ghat (It is a continuous ridge or hills) and the eastern Ghat are on the edges of the peninsular plateau. The Peninsular plateau is broadly divided into:

(a) The Central Highland

(b) The Deccan Plateau

(a) The Central Highland- The major part of central highland is called as Plateau of Malwa. This region is surrounded by Mahadev range in the east,

Aravalli range in the north-west and Vindhya range in the centre. The desert of Rajasthan is situated in its west. Chambal, Sindh, Betwa and Ken are the major rivers of this region. The slope of this region is from the south-west to the north-east. The region is wider in the west and narrow in the east. Its eastern expansion is locally known as Bundelkhand and Baghelkhand. Its eastern most expansion is Chota Nagpur plateau where Damodar and Swarnrekha rivers flow.



Figure 2.6: Peninsular Plateau

There is Satpura range parallel to Vindhya range, and also Amarkantak and Chota Nagpur plateau in the east. Dhoopgarh peak (1350 meters) of Satpura range is situated on Panchamardi hills. In Bihar, the expansion of Chota Nagpur plateau is upto the southern end of Gaya district. Damodar, Sone and Swarnrekha flow through the plateau. Its western central part is 1100 meters high, which is called as 'Paat' region and the highest region of Chota Nagpur plateau. Plateau of Ranchi is in its east with average height of 600 meters. Third is the plateau of Hazaribagh whose average height is 300 meters. Here, Parasnath hill is situated which is 1365 meters high.

On the south of Satpura range, there is Tapi river valley. Narmada and Tapi, both rivers flow through faults. Aravalli hills spread from south-west in Gujarat to north-east in Delhi. Near Delhi, they are called Hills of Delhi. The average height of Aravalli hills is 300.920 meters. In south-west, mount Abu is one of its peaks, which is 1722 meter high.

(b) The Deccan Plateau- The Deccan plateau is also known as Deccan trap. It is formed by lava because of volcanic eruptions. It covers an area of nearly 5 lakh sq.km. It is mainly spread over the states of Madhya Pradesh, parts of Maharashtra, Western Andhra Pradesh, Karnataka and Tamil Nadu. The estimated depth of lava here is about 2134 meters, however the depth is comparatively less in the east and west side.

The Western Ghats or Sahyadris lies on the Western edge of the Deccan plateau. It runs parallel to the western coast for about 1600 km. The average elevation of the Western Ghats is 1000mt. The famous peaks in this area are Doda betta, Anaimudi, Makurti etc. Doda betta (2670 meters) is one of the highest hills of this region. The highest peak in South India is Anaimudi (2695 Meters) which is situated on Annamalai hills. Western Ghats are continuous and have famous passes such as Palghat, Thalghat, Bhorghat and Shinkota. The streams form rapid water falls before entering the Arabian Sea. The famous waterfalls are Jogfalls on Sharavathi, Shivanasamudra falls on Kaveri, etc. form fertile plains and deltas.

The Eastern Ghats are discontinuous low belt. Their average elevation is 600 meters. They run parallel to the east coast from south of Mahanadi valley to the Nilgiri hills to the length of 1800 km. The famous hills are Mahendragiri hills in Odisha, Nallamallai hills in Southern Andhra Pradesh, Annamalai, Pachamalai, Palani, Yelagiri hills in Tamil Nadu. These hills are separated by rivers such as Mahanadi, Godavari, Krishna and Kaveri which

iv. The Coastal Plains

The coastal plains in India run parallel to the Arabian Sea and Bay of Bengal along the peninsular plateau. These plains are formed by sediment deposition caused by the action of rivers and sea. There are two major parts in these plains, the Western Ghat and the Eastern Ghat. The western coastal plain is a narrow belt along the Arabian Sea with average width of 10.60 km. It stretches from Rann of Kutch to Kanyakumari. The rivers of this region have very fast stream that leads to the formation of estuaries on the mouth of the rivers since there is no sediment deposition. In the south of this region, lagoons are formed which include the coastal region of Saurashtra and Kutch. The northern and southern part of Western Ghat is respectively called as Konkan and Malabar.

The eastern coast runs along Bay of Bengal. It is wider than the western coastal plain. Its average width is from 160 to 350 Kms. It spreads from the delta formed by Ganga river to Kanyakumari. Eastern coastal plain is marked by deltas made by the rivers Mahanadi, Godavari, Krishna and Kaveri. There are also lagoons along this coast. The lake Chilka (largest salt water lake in India) in Orissa is found to the south of Mahanadi delta. The northern part of the coast is called Golkunda coast and the southern part is called coromandel coast.

v. The Indian Desert

The Great Indian Desert is situated in the western Rajasthan. It lies towards the western margin of Aravalli Hills and is also called Thar Desert. Its length is 644 km and width is 160 km. The total area under this region is about

1,04,000 square kilometres. This region has semi-arid and arid weather conditions. It receives less than 15 mm of rainfall per year. Luni is the major inland river of this region. All other streams appear only at the time of rainfall otherwise they disappear into the sand. Sand dunes and Barkhans are the major landform in this region.

vi. Islands

There are in total 1256 islands under the water boundary of India. These islands are basically in two groups. There are 572 islands in the Bay of Bengal out of which 36 have human habitation. 43 islands are in Arabian Sea. Along with this, there are several islands in the delta of Ganges and Brahmaputra. There are also small islands between India and Sri Lanka. In the same way, Gujarat, Kerala, Maharashtra and Karnataka also have some coastal islands. The Andaman & Nicobar Islands extend from north to south in Bay of Bengal. They are bigger in size. Channel 10° divides this islands group into two parts. These islands are the upper part of submerged mountains. 'Indira point' (6°30' north latitude) is the southernmost point of India which got submerged into the sea after 2004 Tsunami. Now it has emerged again. These islands are endowed with variety of flora and fauna. An active volcano can be located on the Barren Island in Andaman & Nicobar group of Islands.

Lakshadweep and Minicoy islands are located in the Arabian sea. These islands are formed by coral deposition. Channel 11° divides this group of islands in two parts.

In this way, through the study of this chapter, we got aware about the natural division of India. Along with multiple variations in these landforms, they are also supplementary to each other and enrich our natural resources. The Northern mountain region is a vast source of water and forests. Similarly the plains are the source of grains and foods. Recently, through a geological survey mineral oil reserves are found under Ganga basin. Along with this, the Great plains were also the basis of ancient civilizations. The southern plateau region is full of mineral resources which is very important for our industrial development. Coastal regions are well fertile for the cultivation of rice and also for fishing industry. Several harbours have also developed here.

Therefore, these physical variations are the basis of natural resources of India.

EXERCISE QUESTIONS

OBJECTIVE QUESTIONS

- (1) Which of the following peak is not situated in India?
(a) K2 (b) Kamet (c) Mount Everest (d) Nanda Devi
- (2) Which range of Himalaya is situated on the North-west end of Bihar?
(a) Greater Himalaya (b) Sivalik (c) Middle Himalaya
(d) Eastern Himalaya
- (3) Which theory about the formation of Himalaya is widely accepted?
(a) Continental displacement theory (b) Territorial movement theory
(c) Plate Tectonic theory (d) None of these
- (4) Find out the height of Saddle peak.
(a) 515m (b) 460m (c) 642m (d) 738m
- (5) The most primitive land part of India is...
(a) Peninsular plateau (b) Great plains
(c) Parts of Northern mountain (d) Coastal part

SHORT ANSWER TYPE QUESTIONS

1. Write the name of three parallel ranges of the Himalaya?
2. Name the highest mountain peak of the Karakoram range?
3. Which coastal plain is comparatively broader?
4. Name the three lakes situated in the coastal plain?
5. What is another name of the Western Ghat Mountain?
6. Mention four main characteristics of Central Plain of Ganga.
7. Write two important differences between Himalayan mountains and Peninsular mountains.
8. What is *Khadar* and *Bangar* ?

9. Mention the difference between the Eastern Ghat and the Western Ghat?

LONG ANSWERS QUESTIONS

1. Write the characteristics of the Northern Great Plains?
2. Name the parts of peninsular plateau and elaborately discuss one of its parts?
3. Mention the characteristics of Himalayan Mountain ranges.

FIND OUT

1. Mention the important Glaciers and Passes in Himalaya.
2. Name the states of India where the high peaks of Himalaya are situated.
3. Locate Mussoorie,, Nainital and Ranikhet and name their respective State.
4. In which river and state the world's largest river Island situated is?
5. Where is the only active volcano of India situated?

MAP WORK

Show the following on the political map of India:

1. **Mountain Ranges**- K2, Kanchenjunga, Nanga Parvat, Nanda Devi
2. **Plateaus**- Chota Nagpur, Bundelkhand, Malva
3. Thar Desert, Aravalli Hills, Ganga-Yamuna
4. Plains of Punjab, Plains of Brahmaputra

ACTIVITY

1. Explain the water divider with the help of figure.
2. Prepare the Physical form of India with clay.
3. With the help of thermocol, prepare the structure of India and show the mountains and plateaus.

