



**NOTES**

# **SOCIAL SCIENCE**

**(GEOGRAPHY)**

**PHYSICAL FEATURES OF INDIA**



**REVISION NOTES  
CHAPTERWISE &  
TOPICWISE**

## Chapter 2: Physical features of India

### Concepts Covered:

1. **Major Physiographic Divisions**
  - Major Physiographic Divisions are:
2. **The Himalayan Mountains**
  - **Himalayan Ranges**
    - Greater Himalayas or Himadri or Inner Himalayas
    - Middle Himalayas or Himachal
    - Shivaliks or Outer Himalayas
    - Name of Himalayas from West to East
    - Purvanchal Himalayas
3. **The Northern Plains**
  - **Division of Northern Plains**
    - Punjab Plains
    - Ganga Plains
    - Brahmaputra Plains
    - Bhabar, Terai, Bangar, and Khadar
4. **The Peninsular Plateau**
  - **Central Highland**
  - **Deccan Plateau**
    - Punjab Plains
  - **Western and Eastern Ghats**
5. **The Indian Desert**
6. **The Coastal Plains**
7. **The Islands**
  - **Lakshadweep Islands Andaman and Nicobar Islands**
8. **Importance of different physical features**
9. **Mind Map**  
(Colourful & Interactive/ Complete All Concept Covered)  
Practice Questions (All Topics Available)

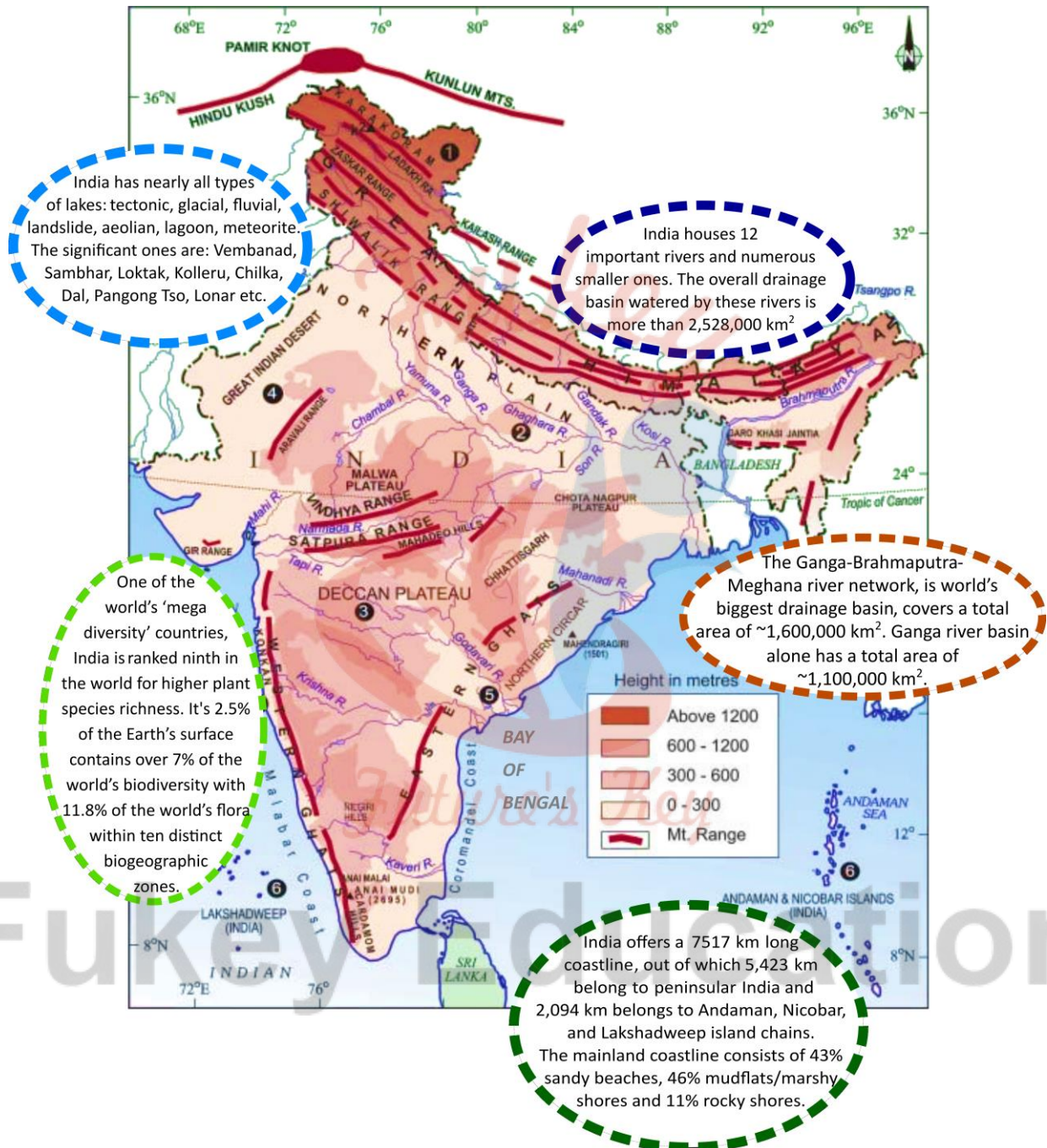


# PHYSICAL FEATURES OF INDIA

## MAJOR PHYSIOGRAPHIC DIVISIONS

### MAJOR PHYSIOGRAPHIC DIVISIONS

#### Major Physiographic Divisions are



- The Himalayan Mountain
- The Northern Plains
- The Peninsular Plateau
- The Indian Desert
- The Coastal Plains
- The Islands

**PHYSICAL FEATURES OF INDIA****MAJOR PHYSIOGRAPHIC DIVISIONS****1. The Himalayan Mountains**

The Himalayas are mountain barriers that stretch over the borders of northern India. These are some of the most rugged and loftiest mountains of the world and are one of the major landforms of the earth. The Himalayas form an arc that covers a distance of 2,400 Km.

**2. The Northern Mountains**

The Northern Mountains consist of the youngest and the loftiest mountain chains in the world. It was formed only few million years ago and formed by the folding of the earth crust due to tectonic activity. It stretches for a distance of 2,500 km from the Indus gorge in the west to Brahmaputra gorge in the east. The width of the Northern Mountains varies from 500 km in Kashmir to 200 km in Arunachal Pradesh. The Pamir Knot, popularly known as the “Roof of the World” is the connecting link between the Himalayas and the high ranges of Central Asia. From the Pamir, Himalayas extend eastward in the form of an arc shape. The term “Himalaya” is derived from Sanskrit. It means “The Abode of Snow”.

**3. The Peninsular Plateau**

The plateau region lies to the south of the Great Northern Plains. This is the largest physiographic division of our country. It covers an area of about 16 lakhs sq.km (about half of the total area of the country). It is an old rocky plateau region. The topography consists of a series of plateaus and hill ranges interspersed with river valleys. The altitude of a large portion of the plateau is more than 600 m from mean sea level. The peak of Anaimudi is the highest point in the plateau. Its height is 2,695 m and is located in Anaimalai. The general slope of this plateau is towards east. The Great Plateau is a part of the Gondwana (very ancient one) land mass.

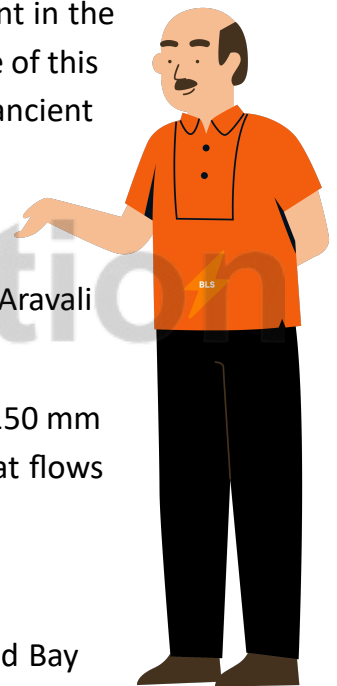
**4. The Indian Desert**

The entire expanse of the Indian desert lies in the western margins of the Aravali hills (demarcated in the physical features of the India map).

It is covered in sandy plains and dunes; this region receives rainfall below 150 mm every year. Hence, there is minimal vegetation cover. The largest river that flows here is Luni.

**5. The Coastal Plains**

The coastal plains are narrow stretches of land across the Arabian Sea and Bay of Bengal. As seen on the physical features of India map, the Coastal Plains in the southern part are broadly divided into, The Konkan, The Kannada Plain, and the Malabar coast. On the eastern side, across the Bay of Bengal, the plains are further classified into Northern Circa and the Coromandel Coast.





## 6. The Islands

India mainly comprises of two major Island groups, the Lakshadweep Islands in the Arabian Sea, and The Andaman and Nicobar Islands. The Andaman Island groups include 204 smaller islands. Furthermore, the A&N islands are divided by 10-degree channels.

The group of islands are further divided into two sections:

- Andaman in the North
- Nicobar in the South



# Fukey Education

## THE HIMALAYAN MOUNTAINS

### Himalayan Ranges

Himalayas are Geologically young and structurally fold Mountains.



- Located in the northern borders of India.
- It runs between Indus and Brahmaputra
- Himalayas represent the loftiest and one of the most rugged mountain barriers of the world.
- Cover 2,400km of distance with its width varies from 400km in Kashmir to 150km in Arunachal Pradesh.
- Altitudinal variations are greater in the eastern half than those in the western half.
- The Himalayas consists of three parallel ranges. In its longitudinal extent
  - Himadri/ Great or Inner Himalayas
  - Himachal or lesser Himalaya/Middle Himalayas
  - Shiwaliks/ outer Himalaya



### Greater Himalayas or Himadri or Inner Himalayas

#### Himalayan Ranges: Himadri, Great or Inner Himalayas

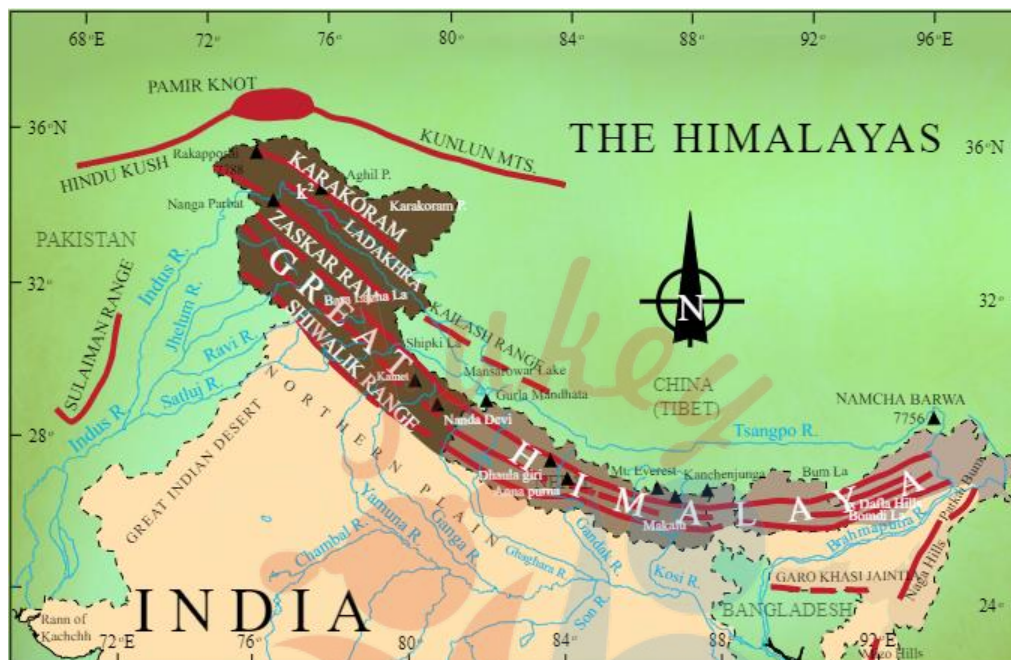
Great or Inner Himalayas or Himadri

- Northernmost Range
- Most continuous range consisting of the loftiest peaks. [6000 M average height]

## PHYSICAL FEATURES OF INDIA

### THE HIMALAYAN MOUNTAINS

- The folds of Great Himalayas are asymmetrical in nature.
- Core is made up of granite and it is perennially snowbound.
- Number of glaciers descend from this range.



Peak	Country	Height (in Mtrs)
Mt. Everest	Nepal	8848
Kanchenjunga	India	8598
Makalu	Nepal	8481
Dhaulagiri	Nepal	8172
Nanga Parbat	India	8126
Annapurna	Nepal	8078
Nanda Devi	India	7817
Kamet	India	7756
Namcha Barwa	India	7756
Gurla Mandhata	Nepal	7728



## PHYSICAL FEATURES OF INDIA

### THE HIMALAYAN MOUNTAINS



**Mount Everest**



**Kanchenjunga**



**Makalu**



**Dhaulagiri**

#### Middle Himalayas or Himachal

##### **Himalayan Ranges: Himachal or lesser Himalaya/Middle Himalayas**

Himachal/ Lesser Himalaya/Middle Himalayas

- Range lying to the south of the Himadri.
- Composed of highly compressed and altered rocks.
- Average altitude varies between 3,700m and 4,500m and the average width is of 50km.
- Pir Panjal range forms the longest and most important range. Dhaul Dhar and Mahabharat are other prominent ranges.
- Famous valley of Kashmir, the Kangra and Kullu valley are found in this range.

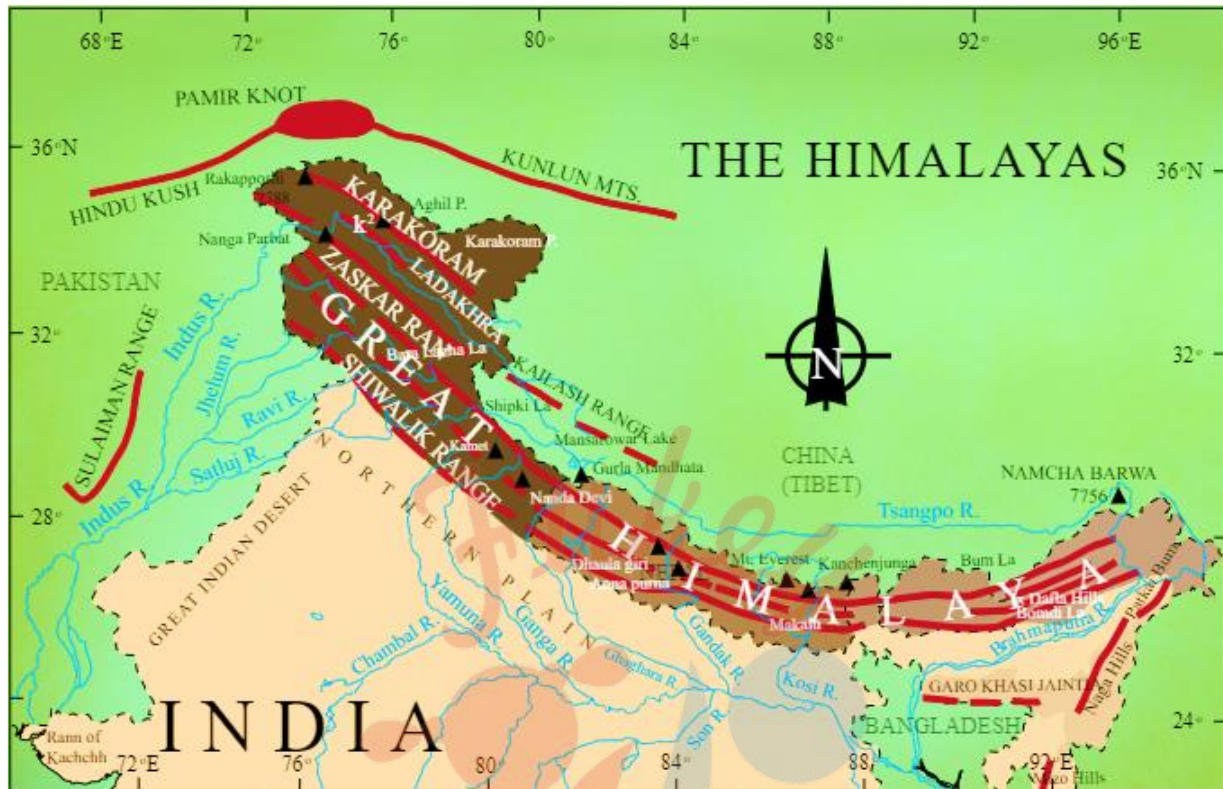
#### Shivaliks or Outer Himalayas

##### **Himalayan Ranges: Shiwaliks or outer Himalayas**

- Outermost range of the Himalayas.
- These ranges are composed of unconsolidated Sediments brought down by rivers from the main Himalayan ranges located farther north.
- Average heights of this range varies from 900 to 1100 metres and they extend over a width of 10-50km.
- Shiwaliks consist of Duns.

## PHYSICAL FEATURES OF INDIA

### THE HIMALAYAN MOUNTAINS



The longitudinal valley lying between lesser Himalaya and the Shiwaliks. E.g., Dehradun, Kotli Dun and Patli Dun

- These valleys are covered with thick gravel and alluvium.

#### Name of Himalayas from West to East

##### Himalayas: West to East

Besides the longitudinal divisions, Himalayas have been divided on the basis of regions from West to East.

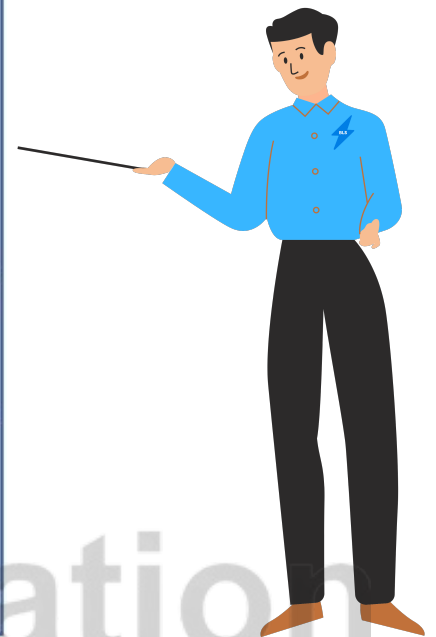
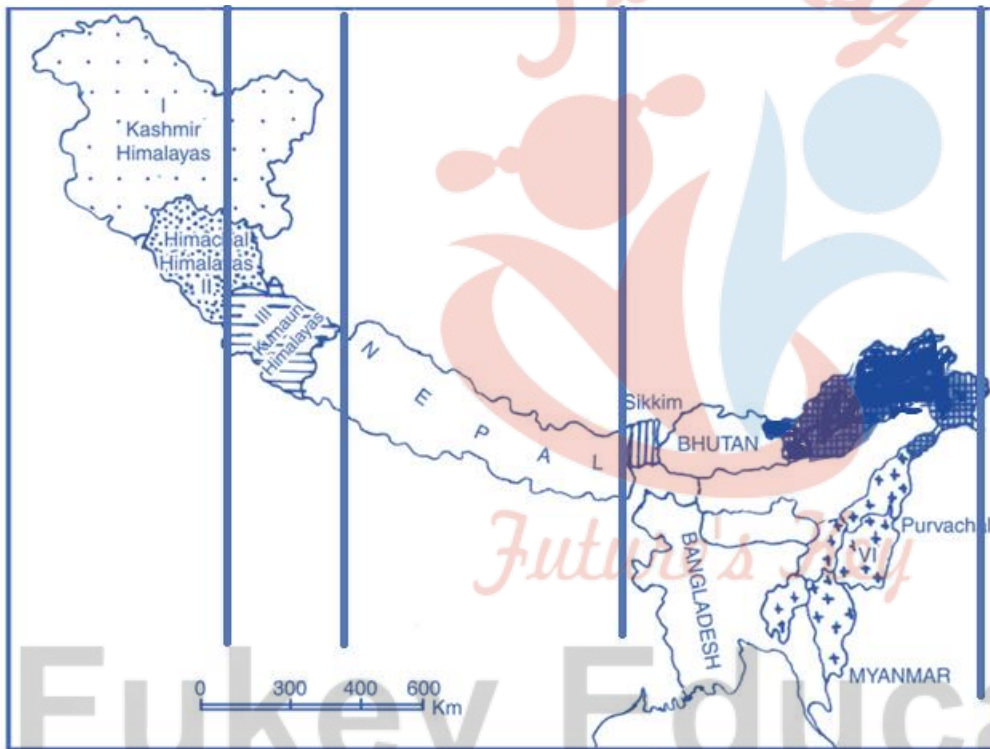
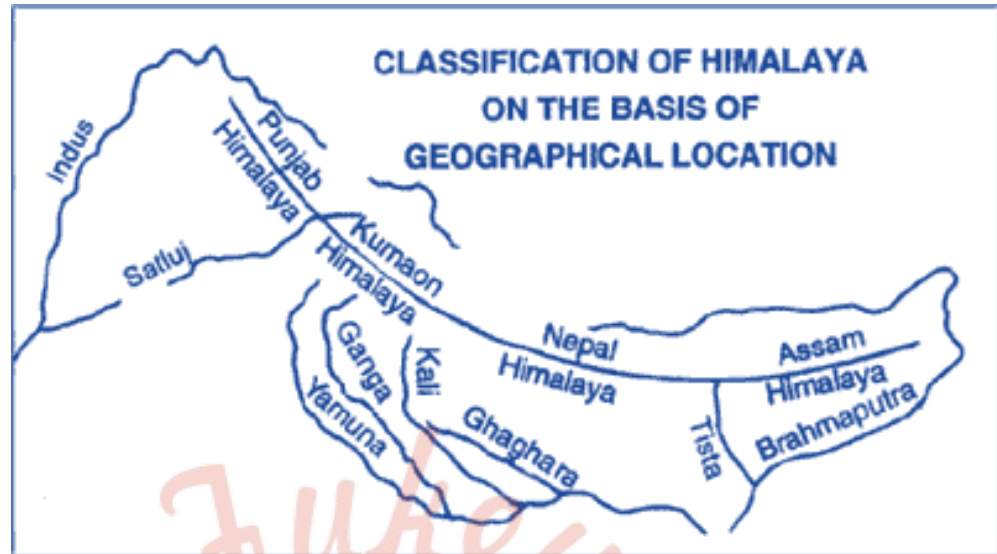
Demarcated by River Valley

- **Himalayas between Indus and Sutlej rivers:** Punjab/Kashmir and Himachal Himalayas
- **Himalayas between Satluj and Kali rivers:** Kumaon Himalayas
- **Himalayas between Kali and Teesta rivers:** Nepal Himalayas
- **Himalayas between Tista and Dihang rivers:** Assam Himalayas



## PHYSICAL FEATURES OF INDIA

### THE HIMALAYAN MOUNTAINS

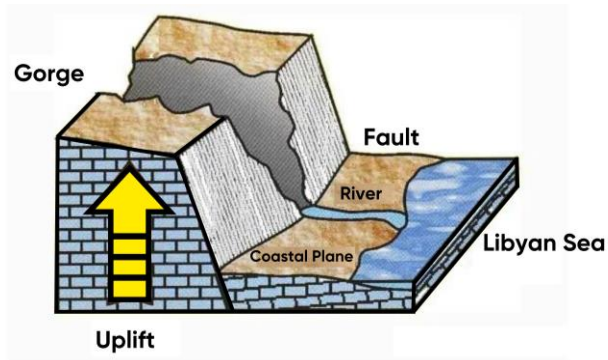


#### Purvanchal Himalayas

Another important part of Himalayas running in north-eastern part are known as Purvanchal Himalayas or Eastern Himalayas.

- Beyond Dihang gorge, the Himalayas bend sharply to the South and spread along the eastern boundary of India.
- It is composed of strong and stones which are sedimentary rocks.
- It is comprised of various hills such as Patkai hills, the Naga hills, the Manipur hills, and the Mizo hills.
- Dense forest, valleys and rivers are found in this range.

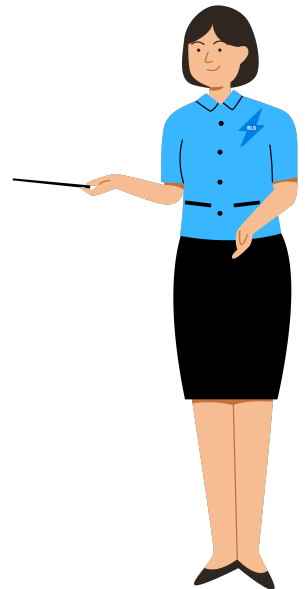
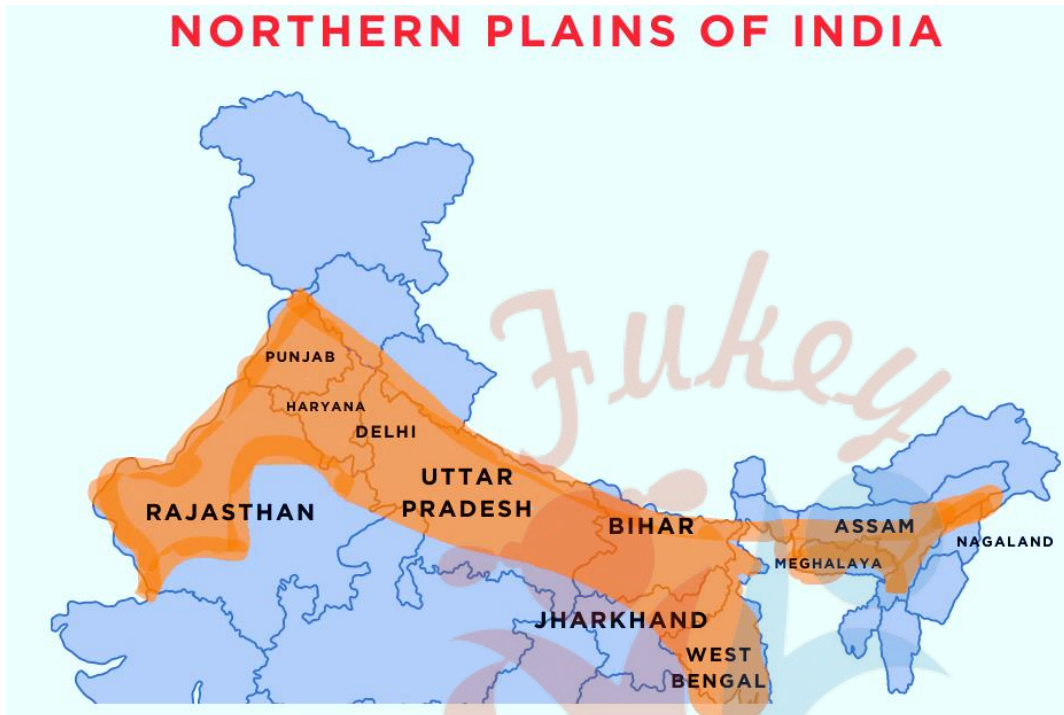


**PHYSICAL FEATURES OF INDIA****THE HIMALAYAN MOUNTAINS**

# Fukey Education

## THE NORTHERN PLAINS

Rivers played a major Role in the formation of Northern plains.



- The Indus, the Ganga, and the Brahmaputra along with their tributaries are responsible for the formation of Northern plain.
- Deposition of alluvium in the foothills of Himalayas brought by them.
- Northern plain spreads over an area of 7 lakh sq. km
  - 2400km long and 240km to 320km broad.
  - Northern plain is densely populated physiographic division.
  - Fertile soil and abundance of water makes it agriculturally productive part.



## PHYSICAL FEATURES OF INDIA

### THE NORTHERN PLAINS

Various geographical features like Riverine islands, doabs and distributaries are found in Northern Plains.

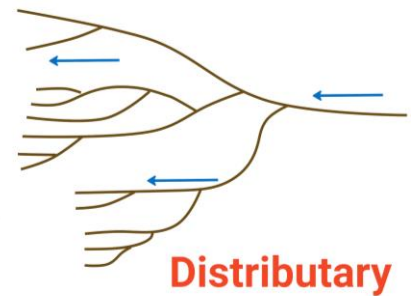
#### Riverine Islands

River Deposition and formation of land between the rivers when the velocity of the river decreases, results in the formation of Riverine Island.

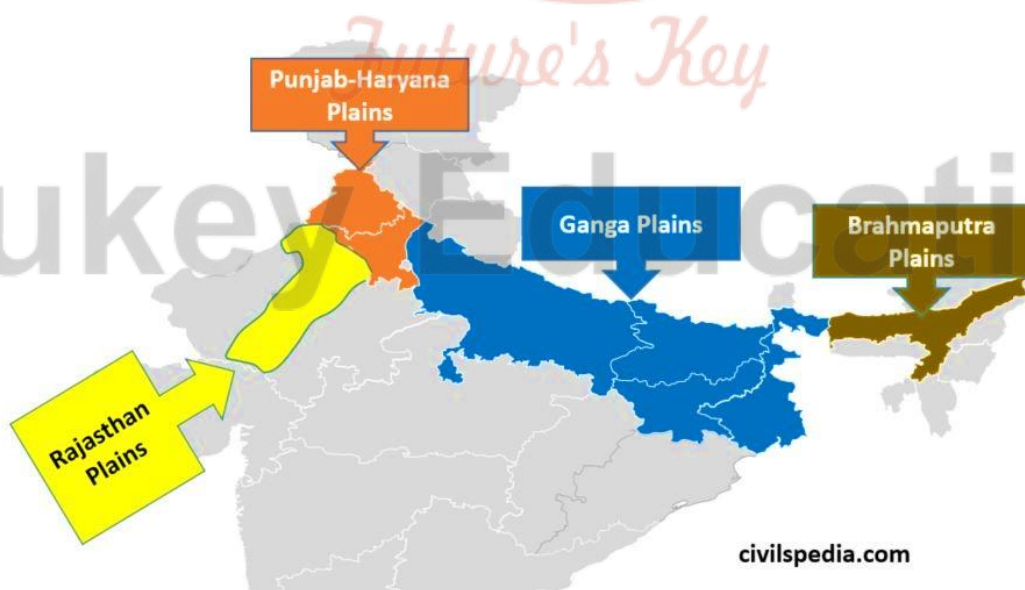
#### Formation of Riverine Island

Majuli, in the Brahmaputra River, is the largest inhabited riverine island in the world.

Due to deposition of sediments in in lower course the river split into numerous channels, leading to the formation of Distributaries.



### Division of Northern Plains



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#### Punjab Plains

- Western part of Northern plain.
- Formed by Indus and Its Tributaries.



## PHYSICAL FEATURES OF INDIA

### THE NORTHERN PLAINS

- Jhelum, the Chenab, the Ravi, the Beas, and the Satluj.
- This section is dominated by.
- E.g., The word Punjab itself is made up of two words.

**Punj = Five & ab = Water** Land between the five rivers.

#### Ganga Plains

- Extends between Ghaggar and Teesta rivers.
- It spread over the state of Haryana, Delhi, U.P, Bihar, partly in Jharkhand and West Bengal

#### Brahmaputra Plains

- East to the Ganga plains lies the Brahmaputra plain.
- Covers most of the Assam and states of Northeast.
- Drained by Brahmaputra River

#### Bhabar, Terai, Bhangar and Khadar

- Apart from the division on the basis of area, Northern plains can also be divided on the basis of diverse relief features.

Northern plain is divided into four regions on the basis of relief features.



**Bhabar**



**Bhangar**



**Terai**



**Khadar**

#### **Bhabar -**

- Belt of about 8 to 16km in width lying parallel to the slopes of the Shiwaliks.
- The Bhabar area is comprised of pebbles which are brought down by river.
- Streams disappears in the Bhabar belt.

**PHYSICAL FEATURES OF INDIA****THE NORTHERN PLAINS****South to the Bhabar belt lies, Terai Region**

The wet, swampy and marshy region where the streams and rivers re-emerge is called Terai.

This region is thickly forested and full of wildlife.

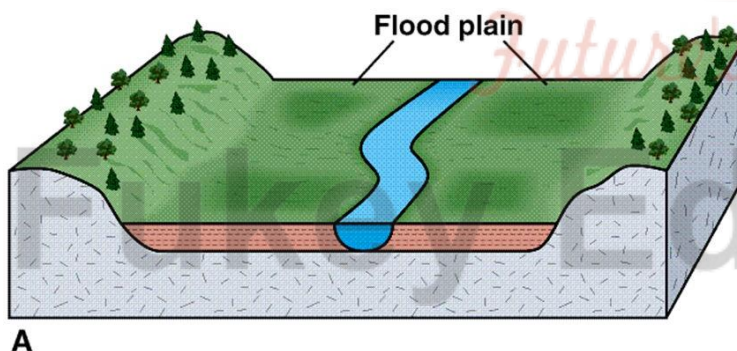
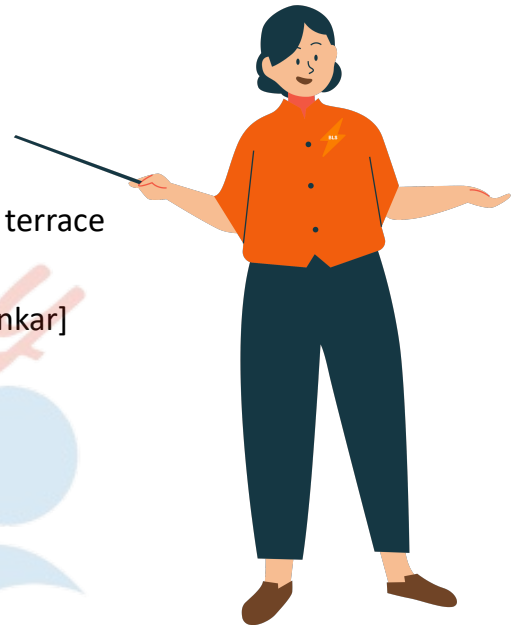
Over the period of time forests have been cleared to create agricultural land and to settle migrants from Pakistan after partition.

**Bhangar**

- Older alluvium.
- It lies above the Floodplains of the river and presents a terrace like feature.
- The soil in this region contains calcareous deposits. [Kankar]
- This is relatively less fertile.

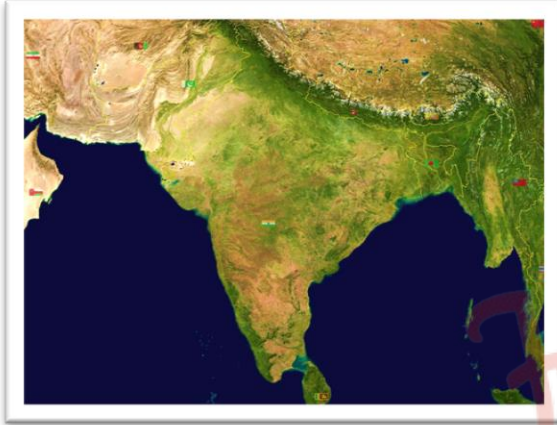
**Khadar**

- New and young alluvium.
- They are renewed almost every year.
- Very fertile.
- Ideal for agricultures, therefore intensive agriculture is performed over Bhangar soil.



## THE PENINSULAR PLATEAU

### The Peninsular Plateau



Peninsular Plateau is a table land composed of the old crystalline, igneous, and metamorphic rocks.

- Formed due to the breaking and drifting of the Gondwana land.
- The Peninsular plateau is made up of black soil [volcanic origin]
- The plateau has broad and shallow valleys and rounded hills.
- Two broad divisions of Plateau: Central Highlands and Deccan Plateau



### Central Highland

- It is the part lying to the north of the Narmada River.
- Major part of the makes up the Malwa Plateau central highland.
- Covered by Vindhya at North, Satpura at South, and Aravallis on the Northwest.



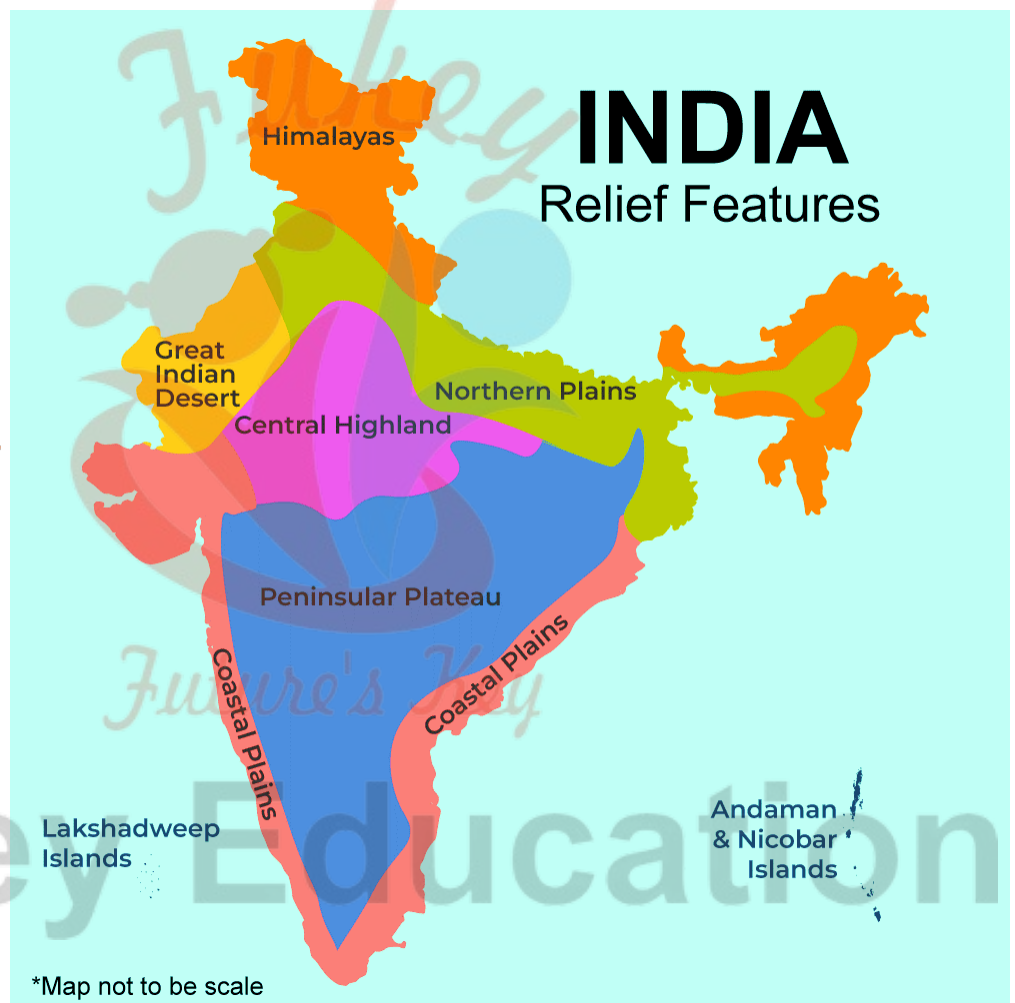
## PHYSICAL FEATURES OF INDIA

### THE PENINSULAR PLATEAU

- Rivers such as the Chambal, the Sind, the Betwa and the Ken flow from its southwest to Northeast. [Indicating the slope]
- The central Highland is wider in the West but narrower in the East known as Bundelkhand and Baghelkhand.
- Chota Nagpur plateau marks the further eastward extension.

### Deccan Plateau

#### Punjab Plains



- Triangular landmass lying South of the river Narmada.
- Borders -
  - Satpura = Northern borders
  - Mahadev, Kaimur hills and Maikal range = Eastern borders
- Tilted towards East.
  - The Deccan plateau is higher in the west and slopes gently eastwards.
- An extension of these plateau is also found Northeast.

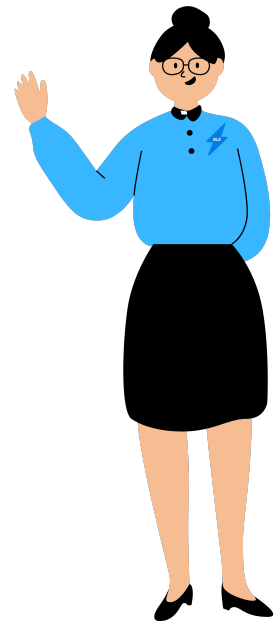
## PHYSICAL FEATURES OF INDIA

### THE PENINSULAR PLATEAU

- Meghalaya plateau, [Garo, Khasi, and Jaintia hills], Karbi-Ang long plateau and North Cachar hills.
- Western Ghats and Eastern Ghats mark the Western and Eastern edges respectively.

### Western and Eastern Ghats

Both Western ghats and Eastern ghats lie west and east of the Deccan plateau respectively. Both the ghats have some distinctive features and differentiating points. Let us discuss them.



#### Western Ghats

Continuous and can be crossed through passes only.  
 Higher than eastern ghats. Average elevation is 900-1600 meter.  
 They stretch from Tapi to the South of the Nilgiri hills. Western ghats cause Orographic Rain.  
 Height progressively increases from North to South. [Highest peak Anamudi (2695M)]

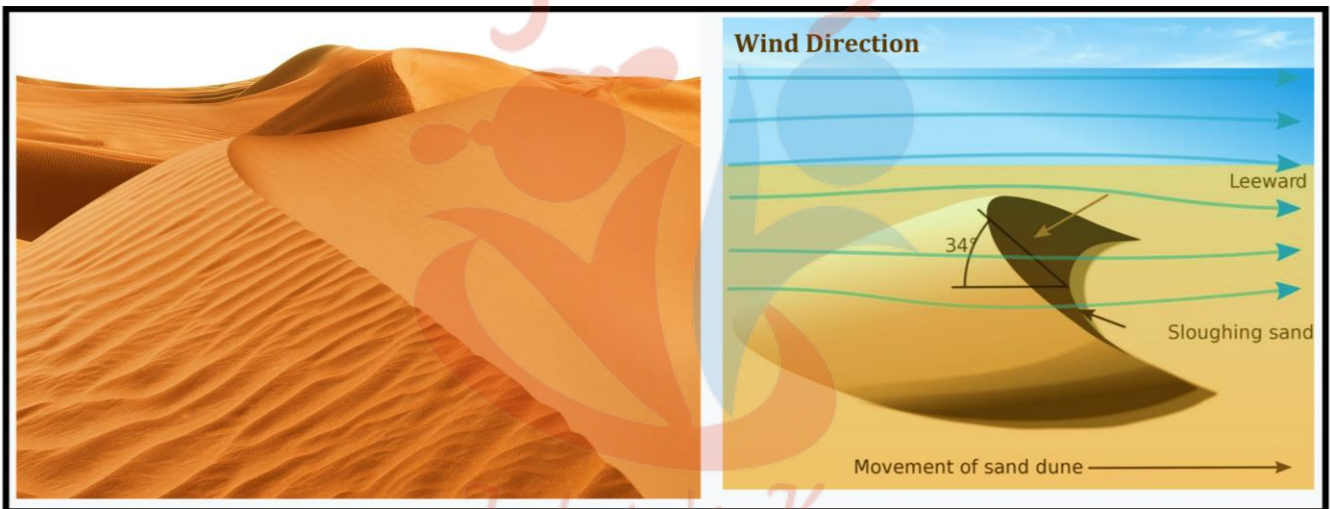
#### Eastern Ghats

Discontinuous. Irregular and dissected by rivers.  
 Average elevation is 600 metres.  
 The eastern ghats stretch from the Mahanadi valley to the Nilgiri.  
 Highest peak of eastern ghats is Mahendragiri [1,501 M]  
 Shevaroy Hills and Javadi Hills are located to the southeast of it.

## THE INDIAN DESERT

### Thar Desert

- The Indian Desert lies towards the western margin of the Aravali Hills.
  - Undulating Sandy plains, covered with Sand dunes.
  - This region receives low rainfall [Below 150MM], streams appear during the rainy Season and never reach sea. Luni is the only large river in this region.
- It has arid climate with low vegetation cover.
- Barchans is another important features of the Indian desert. They are Crescent shaped dunes found in Thar desert.

**Barchans****Formation of Barchans**

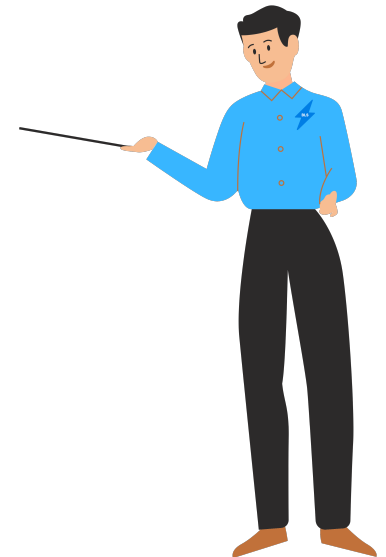
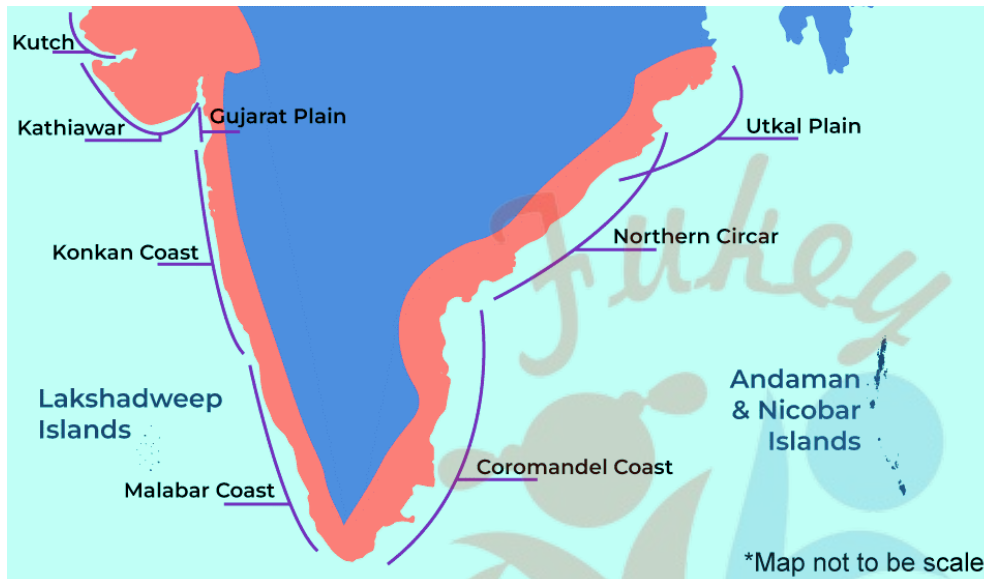
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## THE COASTAL PLAINS

### The Coastal Plains

It is a stretch of Narrow Coastal strips at the margins of peninsular plateau. These strips run along the Arabian Sea on the West and the Bay of Bengal on the East.



- Western Coastal Plains
- Eastern Coastal Plains

Western Coast	Eastern Coast
It is narrow plain sandwiched between the Western Ghats and Arabian sea.	The coastal area is wide and level along the Bay of Bengal.
It consists of three sections: <ol style="list-style-type: none"> <li>Konkan [Mumbai-Goa]</li> <li>Kannad Plain [Karnataka]</li> <li>Malabar Coast [Kerala]</li> </ol>	It consists of two sections: <ol style="list-style-type: none"> <li>Northern Circar</li> <li>Coromandel Coast</li> </ol>
River on Western Coast forms Estuaries.	Rivers such as the Mahanadi, the Godavari, Krishna, and the Kaveri form delta on Eastern Coast

The Chilika Lake is the largest saltwater lake in India. It lies in the state of Odisha, to the south of the Mahanadi delta.

**PHYSICAL FEATURES OF INDIA****THE COASTAL PLAINS**

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## THE ISLANDS

### Lakshadweep Islands Andaman and Nicobar Islands



Besides the vast mainland. The country has two groups of Islands.

Lakshadweep Islands	Andaman & Nicobar Islands
Group lying close to the Malabar coast of Kerala.	Elongated chain of island in Bay of Bengal.
It is composed of small coral islands	Entire group is divided into two broad categories. a. Andaman in the North b. Nicobar in the South
Earlier they were known as Laccadive, Minicoy, and Amindivi. [Renamed in 1973]	It is believed that these islands are an elevated portion of submarine mountains.
It covers small area of 32 sq km.	Equatorial climate and thick forest cover.
Administrative headquarter of these islands is. Kavaratti.	

- Pitti island, uninhabited island in Lakshadweep has a bird sanctuary.



**PHYSICAL FEATURES OF INDIA****THE ISLANDS****Corals –**

- Corals are short-lived microscopic organism, which live in colonies.
- They flourish in shallow, mud-free, and warm waters.
- They secrete calcium carbonate. Their skeleton makes up the Reef.

**Importance of different Physical Feature**

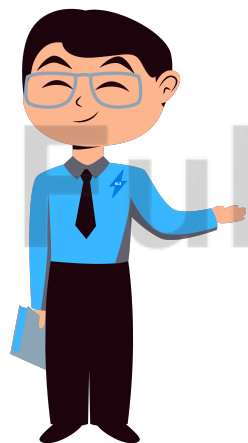
The different physiographic units highlight the unique features of each region. Adds value to the natural resources of the country.

**Mountains**

Major sources of water and forest wealth.

**Northern Plains**

They are known as Granaries of the country.

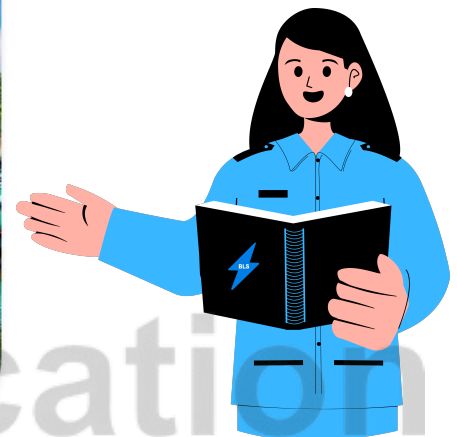
**Plateau**

They are called Storehouse of Minerals



**PHYSICAL FEATURES OF INDIA****THE ISLANDS****Coastal regions and Island**

Provides sites for fishing, and port activities.





## IMPORTANCE OF DIFFERENT PHYSICAL FEATURES

The different physiographic units highlight the unique features of each region. Adds value to the natural resources of the country.

### **Mountains**

Mountains are a storehouse of water. Many rivers originate in the glaciers in the mountains.

Reservoirs are made and the water from the mountains is used for irrigation and generation of hydroelectricity.

Mountains support a rich variety of flora and fauna. Mountains also affect the climate of an area.



### **Northern Plains**

The fertile soil and assured water resources have made these plains a rich agricultural land. These plains are the granaries of India.

The plains have a good network of roads and railways which has led to large scale industrialization of the region.

**PHYSICAL FEATURES OF INDIA****IMPORTANCE OF DIFFERENT PHYSICAL FEATURES****Plateau**

Plateaus are rich in mineral deposits.

Most precious metals like gold, silver, etc. are obtained from mines found in plateau regions.

**Coastal regions and Island**

The coastal regions of India are noted for a trade, industrial centres, tourist centres, fishing and salt making. They provide important hinterlands for big ports. These ports are inevitable for the economic growth of the nation.

**PHYSICAL FEATURES OF INDIA****IMPORTANCE OF DIFFERENT PHYSICAL FEATURES**

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## PHYSICAL FEATURES OF INDIA

## MIND MAP

