

STUDY COURSE MATERIAL

Social science- Geography

SESSION-2020-21

CLASS-IX

TOPIC: 2: Physical Features of India

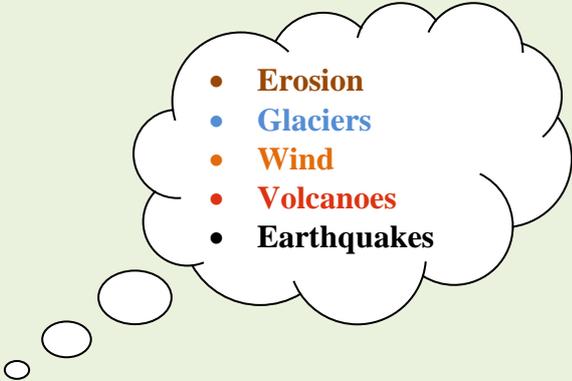
DAY-1

★ **NCERT MATERIAL**

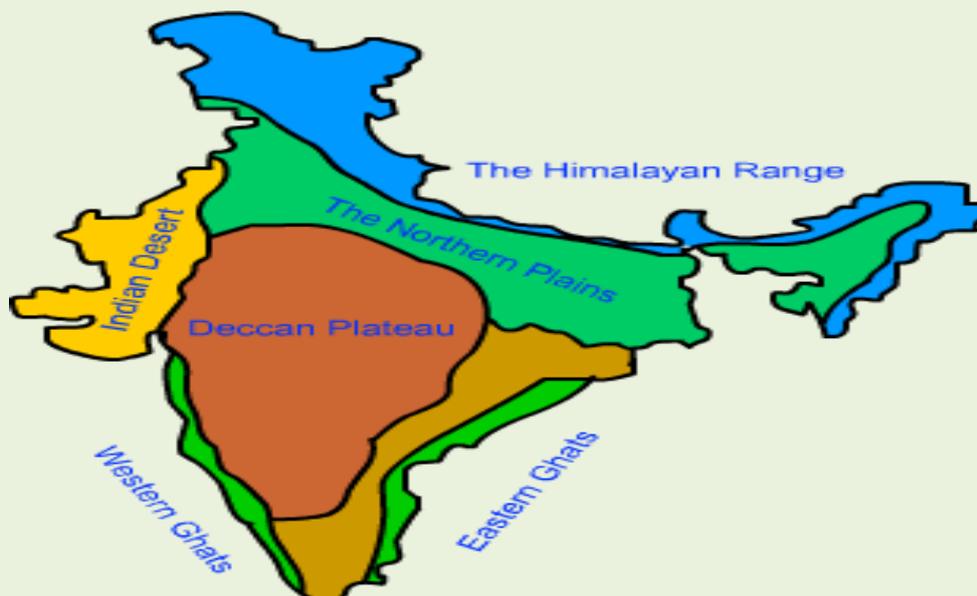
<http://ncert.nic.in/ncerts/l/iess102.pdf>

★ **TEACHING MATERIAL**

❖ **The forces that change the face of Earth**

- 
- **Erosion**
 - **Glaciers**
 - **Wind**
 - **Volcanoes**
 - **Earthquakes**

India is a vast country. It has a wide variety of landforms. Almost all **major physical features** are present in India i.e. **mountains, plateaus, plains, deserts and islands.**



✚ **Plate Tectonics:** A large fragments of the earth's crust torn due to the rising currents.

❖ Plate Tectonic Theory

✚ Given by Alfred Wegener in 1912.

✚ Plate Tectonics is a theory of Geology. It explains movement of the **Earth's lithosphere** which is **earth's crust and the upper part of mantle**. The Lithosphere is divided into several plates, some of which are **very big and can be entire continent**.

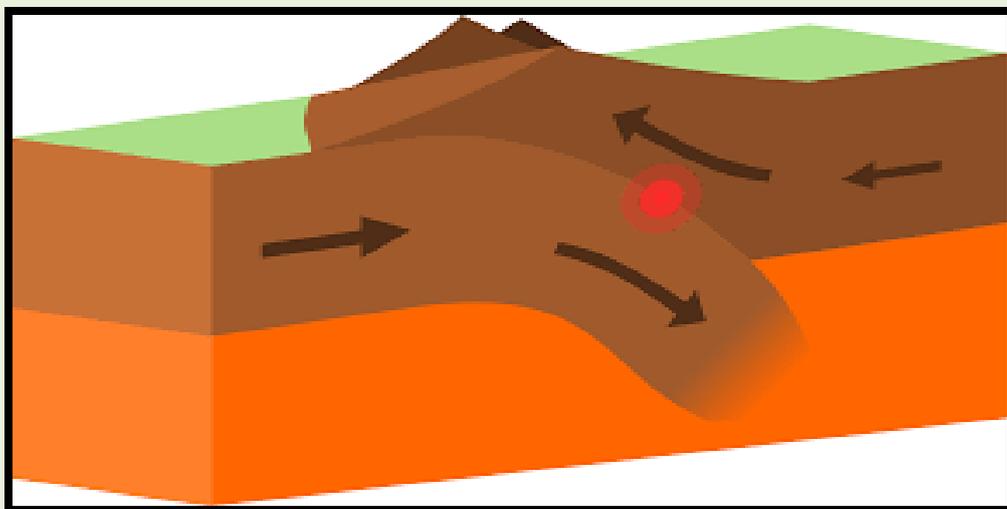
✚ The Lithosphere of the earth is divided into small number of plates which float on and travel independently over the mantle and much of the earth's seismic activity occurs at the boundaries of these plates.

✚ This led to different formations which are:



❖ The plates moves in three different directions:

1. **Convergent Boundary**

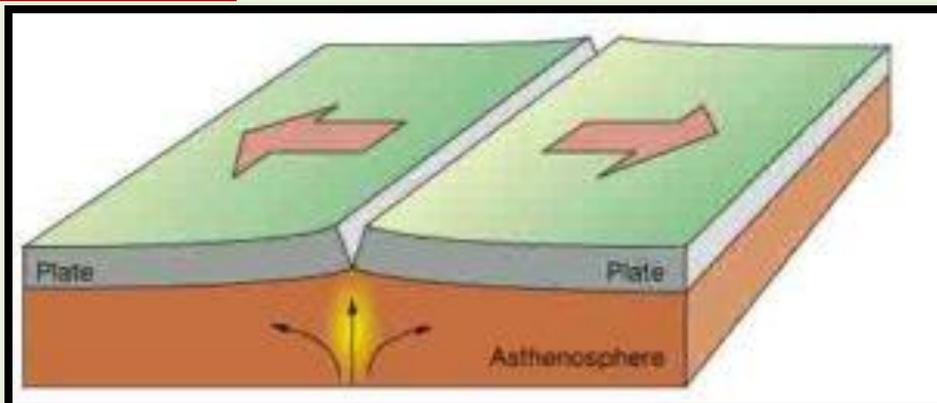


✚ These plates crumble and fold to form new landforms.

✚ They are mainly responsible for mountain building.

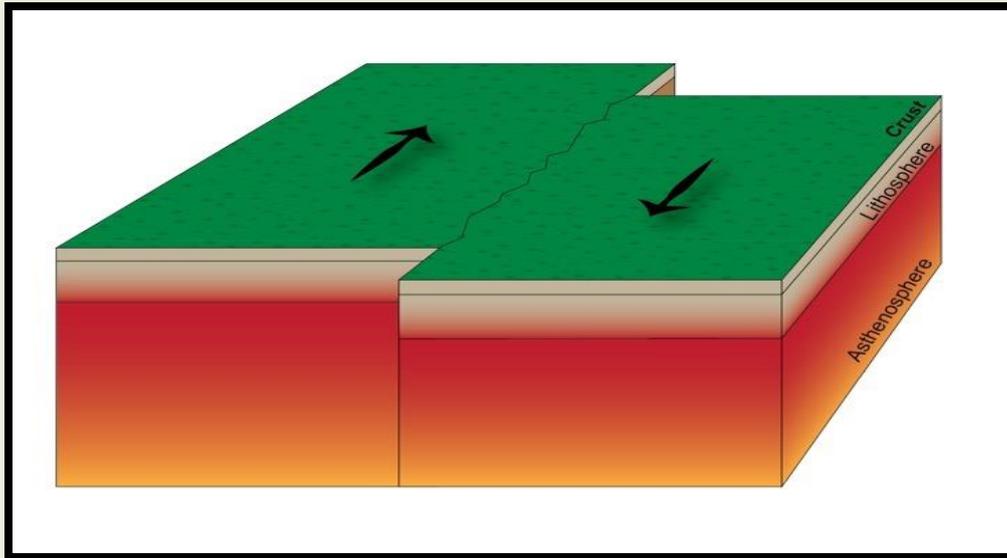
✚ Example: Himalaya.

2. **Divergent Boundary**



- ✚ When two plates are moving away from each other.
- ✚ It causes faulting.
- ✚ Example: Mid- Atlantic Ridge, Block Mountain (Aravali)

3. Divergent Boundary



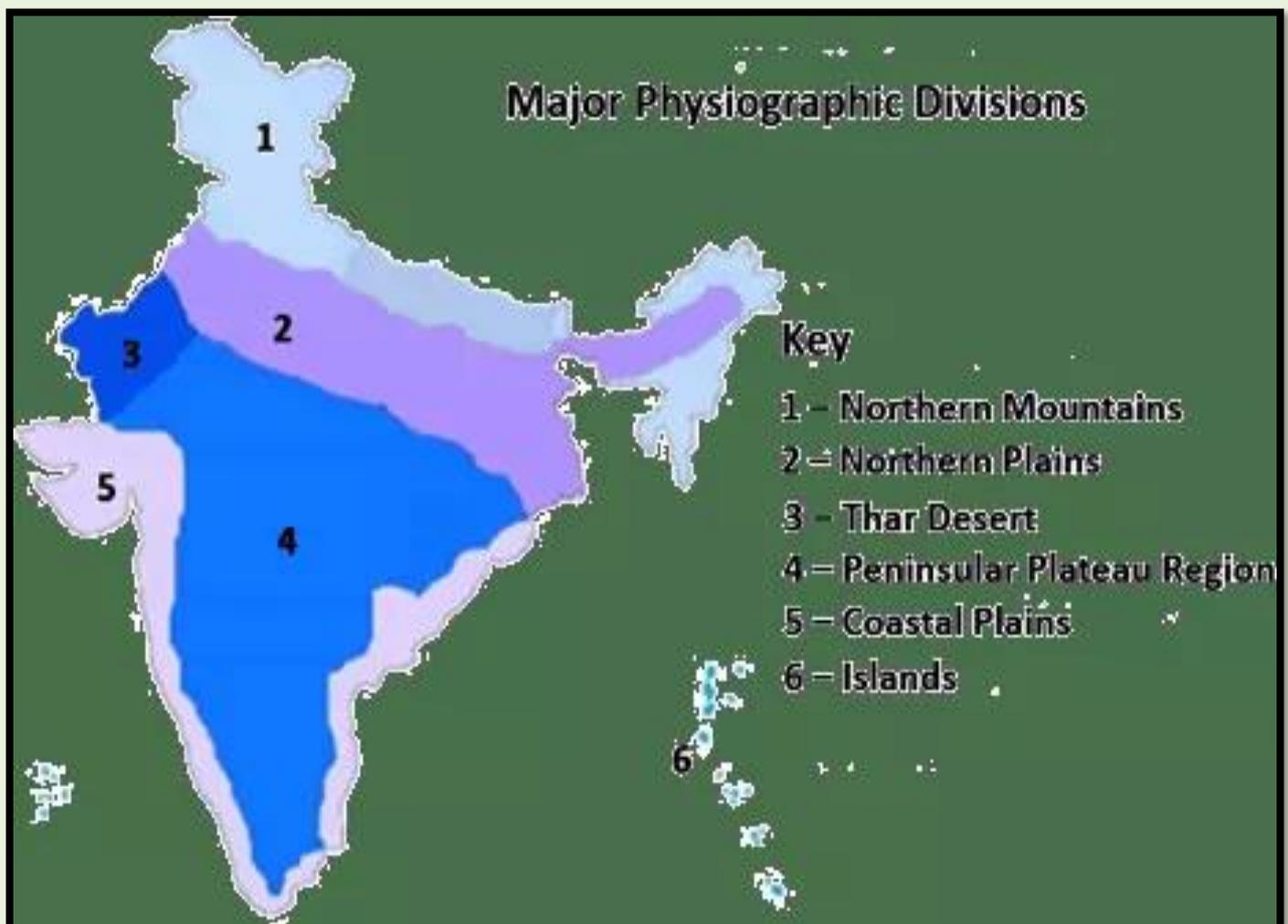
- ✚ In the event of two plates coming together, they may either collide or crumble or may slide under the other.

- ★ The movement of the plates changed the position and size of the continents and also responsible for the evolution of the present land features of India.
- ★ The oldest landmass i.e. Peninsula Part of India was a part of the Gondwana Land.





❖ Major Physiographic Division



Himadri- Greater Himalayas or Inner Himalayas.

- ✓ This is the northernmost range.
- ✓ This is the most continuous range.
- ✓ It contains the loftiest peaks.
- ✓ The average height of peaks in this range is 6000 meters.
- ✓ It is perennially snow bound.
- ✓ Core of this part is composed of granite.

Himachal- Middle Himalayas.

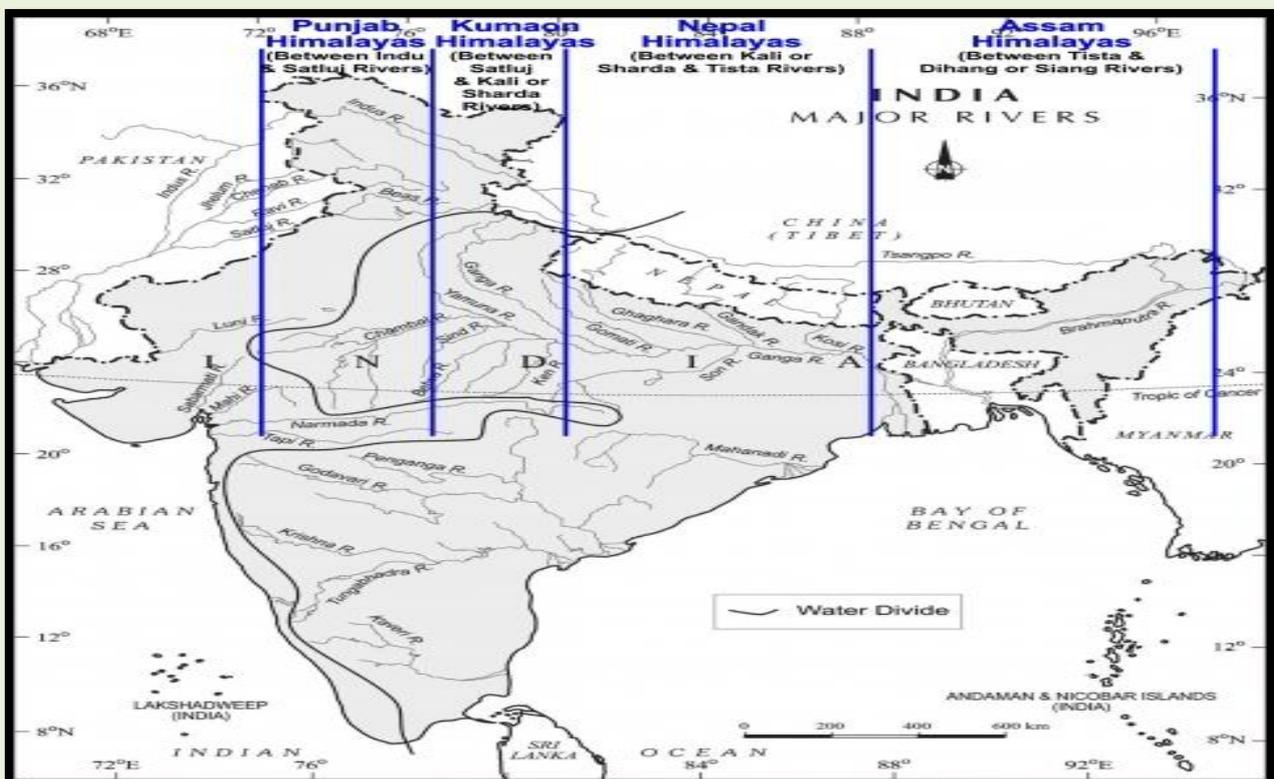
- ✓ This range lies towards the south of the Great Himalayas.
- ✓ The altitude of peaks in this range varies from 3700 to 4500m
- ✓ This range is mainly composed of highly compressed and altered rocks.
- ✓ The most important mountain range here is Pir Panjal mountain range.
- ✓ Dhaula Dhar and Mahabharata mountain ranges are also important ranges of lesser Himalayas.
- ✓ All great valleys like Kashmir valley, Kangra valley, Kullu valley are present here.
- ✓ This region is also known for its hill station like Kullu-Manali, Shimla, Mussoorie, Nainital, etc.

Shivalik- Outer Himalayas

- ✓ The outermost range of the Himalayas is known as Shivaliks are known as 'Manak Parbat' in ancient times.
- ✓ The altitude varies between 900 and 1100m in this range.
- ✓ The width varies between 10-50 km.
- ✓ These ranges are composed of unconsolidated sediments brought down by the rivers.
- ✓ The longitudinal valley lying between the Himachal and Shivaliks are called Dun.
- ✓ Major duns found in the region are Dehra Dun, Kothri Dun, Chaukham dun, Patil dun and Kotadun.
- ✓ The dun of Dehra is the biggest with a length of 35km and width of 25km.

❖ The Himalayas can be divided into four sections:

- ✓ Punjab Himalayas- they lie between Indus and Satluj
- ✓ Kumaon Himalayas- they lie between Satluj and Kali
- ✓ Nepal Himalayas- they lie between Kali and Tista
- ✓ Assam Himalayas- they lie between Tista and Dibang



EASTERN HILLS AND MOUNTAINS:

The Brahmaputra marks the eastern border of the Himalayas. Beyond the Dihang gorge, the Himalayas bend sharply towards south and form the Eastern hills or Purvachal. These hills run through the north eastern states of India. They are mostly composed of sandstones (i.e. Sedimentary rocks). These hills are covered with dense forest. These hills are composed of the Patkai Hills, Naga Hills, Manipuri Hills and Mizo Hills

★ Questions:

1. Write a note on formation of Himalayas?
2. What is Purvanchal?

DAY-3

❖ The Northern Plains

- ✓ The northern plain spread over an area of 7 lakh sq. km. It is about 2400 km long
- ✓ The rivers emerging from northern mountains are associated with the depositional work.
- ✓ The northern plain was formed by the three rivers- the Indus, the Ganga and the Brahmaputra.
- ✓ Northern plains have four regions with different relief features:

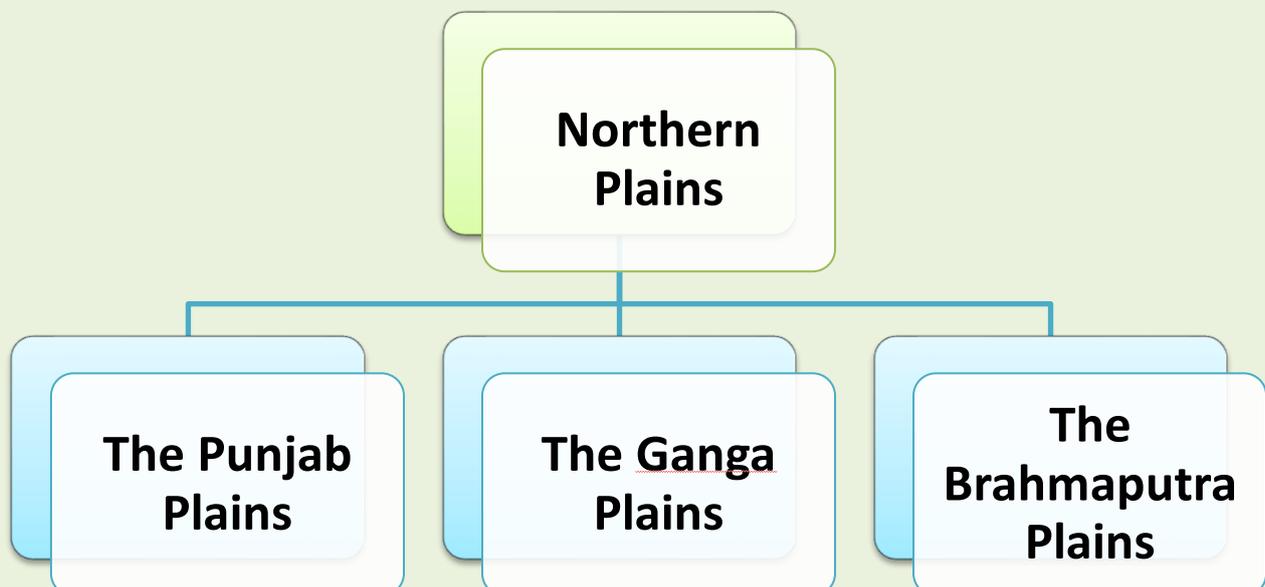
Bhabar- a thin belt of 8-16 km in width where the rivers from the Himalayas leave the pebbles.

Terai- wet and soggy region created by rivers and streams.

Bangar- the largest section of the northern plain made up of old alluvium.

Khadar- contains the younger deposits of the flood plains that are renewed every year.

The northern plain is divided into three sections:



◎ Punjab Plains:

- The Punjab plains form the western part of the northern plain.
- This is formed by the Indus and its tributaries; like Jhelum, Chenab, Ravi, Beas and Sutlej.
- A major portion of this plains is in Pakistan.
- Doabs are found in Punjab plains.
- Doab (do, "two" + ab, "water" or "river"). It as "a region or land lying between and reaching to the meeting of the two rivers."

◎ Ganga Plains:

- This plain extends between Ghaggar and Tista rivers.
- The northern states, Haryana, Delhi, UP, Bihar, part of Jharkhand and West Bengal in the east lie in the Ganga plains.

◎ Brahmaputra Plains:

- This plain forms the eastern part of the northern plain and lies in Assam.

★ Questions:

1. What is Bangar?
2. How did northern plains come to existence? Write two points briefly. Also mention two features of these plains.

DAY-4

❖ The Peninsular Plateau

- The peninsular plateau is a table land created by breaking and drifting of Gondwana land.
- The peninsular plateau is a tableland which contains igneous and metamorphic rocks.
- It is composed of the oldest rocks because it was formed from the drifted part of the Gondwana land.
- Broad and shallow valleys and rounded hills are the characteristic features of this plateau.
- One of the important features of the peninsular plateau is the black soil area which is known as the Deccan Trap.
- This black soil originated from the volcanic eruption. Thus, it has igneous rocks.
- The plateau has been divided mainly into two divisions:

The Central Highlands:

- The Central Highlands lies to the north of the Narmada river.
- It covers the major portion of the Malwa plateau.
- Location:
 - **North of Narmada river.**
 - **Vindhya ranges in the South.**
 - **Aravalis in the North West.**
- Covers Malwa plateau, Bundelkhand, Baghelkhand and Chhotanagpur plateau.
- The rivers in this region flow from southwest to northeast (i.e. Chambal, Sindh, Betwa, Son, etc.); which indicates the slope of this region.
- It is wider in the west and narrow in the east.

- ❑ Bundelkhand and Baghelkhand mark the eastward extension of this plateau.
- ❑ The plateau further extends eastwards into the Chhotanagpur plateau.

The Deccan Plateau:

- ✓ The Deccan Plateau lies to the south of the Naramada River.
- ✓ It is triangular in shape.
- ✓ The slope of the Deccan Plateau is from west to east.
- ✓ Most of the rivers flow from west to east.
- ✓ Location:
- ✓ **The Satpura range makes its northern part.**
- ✓ **The Mahadev, Kaimur Hills and Maikal range make its eastern part.**
- ✓ **It extends into the north east which encompasses Meghalaya, Karbi-Anglong Plateau and North Cachar Hills.**
- ✓ **Garo, Khasi and Jaintia hills are the prominent ranges starting from west to east.**

❖ Western Ghats & Eastern Ghats:

- ⊙ Western Ghats stretch from the Tapi River to Kanayakumari. But The Eastern Ghats stretch from Mahanadi Valley to the Nilgiris in the south.
- ⊙ Western Ghat's average width is 50 to 80 km. But Eastern Ghat's width varying from 100 to 200 km.
- ⊙ Western Ghats is source of many large rivers But no big river originates from the Eastern Ghats.
- ⊙ Western Ghats are continuous and can be crossed through passes only. But Eastern Ghats has been divided into several parts by large rivers.
- ⊙ Western Ghats average elevation is 900 to 1,600 meters But the average elevation of Eastern Ghats is about 600 metres above sea level.
- ⊙ Highest Peak of Western Ghats: Anai Mudi (2695 meters).
- ⊙ Highest Peak of Eastern Ghats: Mahendragiri (1501 meters).
- ⊙ Western ghats receives orographic(rain because of mountain) type of rainfall. South-west monsoons coming from the Arabian Sea and causes heavy rainfall. Eastern Ghats is almost parallel to the monsoons coming from the Bay of Bengal and does not cause much rainfall.

★ Questions:

1. Give an account on Deccan Plateau.
2. Compare the main features of the Western Coastal Plain and Eastern Coastal Plain.

DAY-5

❖ The Indian Desert

- ✓ It lies towards the western margins of the Aravali Hills.
- ✓ It is a sandy plain covered with sand dunes.
- ✓ This region mainly receives low rainfall i.e. below 1.50mm per year.
- ✓ Major area is covered by Barchans.
- ✓ Luni is the only river in the region.

❖ The Coastal Plains

- ⊙ The peninsula plateau is flanked by the narrow coastal strips which run along the Bay of Bengal in the east and Arabian Sea in the west.
- ⊙ The western coast is divided into:
- ⊙ Konkan(Mumbai-Goa)
- ⊙ Kannad Plain(Central stretch-Goa -Kerala)

- ⦿ Malabar Coast(Southern stretch-Kerala-Kanyakumari)
- ⦿ The eastern coastal strip is divided into:
- ⦿ Northern Circar
- ⦿ Southern circar/ Coromandal coast

❖ **The Islands**

✓ **Lakshadweep islands**

- The Lakshadweep Islands covers an area of 32 sq kms. It got its name in the year 1973.
- The administrative headquarters of Lakshadweep is at Kavaratti Island.
- This group of islands is composed of small coral islands.
- This group of islands is rich in terms of biodiversity (flora & fauna).

✓ **Andaman and Nicobar islands**

- The Andaman & Nicobar Islands are located in the Bay of Bengal.
- These islands are bigger in size and have more number of islands.
- This group of islands can be divided into two groups. The Andaman is in the north and the Nicobar is in the south.
- These islands are located close to equator and thus, experience equatorial type of climate and also have thick forest cover.
- These islands too have rich biodiversity (flora & fauna).

★ **Questions:**

1. Write a note on corals.
2. Explain the formation of Peninsular Plateau. Write any four of its distinct features.
3. “The land of India displays great physical variations.” Justify this statement with five examples.
4. Describe the features of Western Ghats and Eastern Ghats in reference to height, slope, continuity, rivers and vegetation.
5. Define a ‘Geosyncline.’ What is the result of the upliftment of the sediments in the basin?