## Physical features of India (Easy Notes for class 9th)

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## Introduction:

In previous chapter we learnt about the size and location of India and how it has been proved advantageous for the entire country. This lesson will take you further and tell you about the different physical features of India that provide the benefit of getting vast number of natural resources on a single territory.

# **Major Physio-graphic Divisions:**

- 1. The Himalayan Mountains.
- 2. The Northern Plains.
- 3. The Peninsular Plateau.
- 4. The Indian Desert.
- 5. The Coastal Plains.
- 6. The Islands.

## The Himalayan Mountains:

- The Himalayan mountains are geologically young and structurally fold.
- They stretch over the **northern borders** of India.
- The highest mountain peak of India is **Kanchenjunga**. Its height is **8598 metres**.
- These mountains are **loftiest** (very tall) and **most rugged** (with lots of rocks) mountains of the world.
- These mountain ranges run in a **west-east directions** from the Indus to the Brahmaputra.

- They cover distance of about 2,400 Km.
- o Their width varies from 400 Km in Kashmir to 150 Km in Arunachal Pradesh.
- o Like width, the altitude also varies but the variation is much greater in the eastern half.
- The Himalaya consists of **three parallel ranges** in its longitudinal extent.
  - 1. Himadri or Great or Inner most Himalayas.
  - 2. Himachal or Lesser Himalayas.
  - 3. **Shiwaliks** or Outer most Himalayas.

#### Himadri:

- It is the most continuous range consisting of the loftiest peaks
- Its average height is 6,000 meters.
- It contains all prominent (famous) Himalayan peaks.
  - o For example: K2, Nanda Devi and Nanga Parbat.
- The core of Inner Himalayas is composed of granite.
- In addition, it remains **snow bound** throughout the year.
- Glaciers go down to the lower places from this range.
  - o Some of the **Glaciers** are:- Gangotri, Chaturangi, Bhagirathi, Kharak, Satopanth, Kamet etc.
  - Passes: Karakoram pass, Shipki La Pass, Nathula pass Bomdi La and Zoji La Pass.

#### Himachal:

- Himachal or Lesser Himalayas forms the **most rugged** (uneven) mountain system.
- The ranges are mainly composed of highly compressed and altered rocks.
- The altitude varies between 3,700 and 4,500 metres.
- Its width is of 50 Km.
- Moreover, Lesser Himalayas have several ranges such as Pir Panjal range (longest range), the Dhaula Dhar and the Mahabharat ranges.
- In addition, these ranges have famous valleys like Kashmir valley, the Kangra and Kullu valley (in H.P.)

#### Shiwaliks:

- Shiwaliks are the **outer-most range** of Himalayas.
- They have an altitude varying between 900 and 1100 meters.
- The width of Shiwaliks is of 10-50 Km.
- These ranges are **composed of loosely arranged sediments** brought down by rivers from the Himalayas.
- The longitudinal valley lying between lesser Himalaya and the Shiwaliks are known as Duns.
  - o For Example: Dehra Dun (Uttarakhand), Kotli Dun (H.P.) and Patli Dun.

#### Division on the basis of regions from West to East:

- 1. **Punjab Himalayas:** Himalayas lying between Indus and Satluj.
  - Note: Regionally, it is also known as Kashmir and Himachal Himalayas.
- 2. Kumaon Himalayas: Between Satluj and Kali rivers.

- 3. **Nepal Himalayas**: They are between Kali and Teesta rivers.
- 4. Assam Himalayas: These Himalayas are between Teesta and Dihang rivers
- 5. <u>Purvachal</u> or Eastern hills and mountains: It comprises the Patkai hills, the Naga hills, the Manipur hills and the Mizo hills.

## The Northern Plain:

- Northern plains are divided on the basis of river system and Relief features.
- These plains are 2400 km long and 240 to 320 km broad.
- In Addition, they are **densely populated** areas due to high level of fertility.
- In the lower courses there are riverine islands.
  - For Example: Majuli, in the Brahmaputra river, is the largest inhabited riverine island in the world.

## On the basis of River System:-

- Three major rivers are the **Indus**, the **Ganga** and the **Brahmaputra**.
  - 1. **Punjab Plains:** It is formed by the Indus and its tributaries- the Jhelum, the Chenab, the Ravi, the Beas and the Satluj.
  - 2. Ganga Plain: It extends between Ghaggar and Teesta rivers.
    - It covers Haryana, Delhi, U.P., Bihar, partly Jharkhand and West Bengal.
  - 3. Brahmaputra Plain: It lies particularly in Assam.

#### On the basis of Relief features:

- This division consist of four regions. These are:-
  - 1. Bhabar: This region is located in Lower Himalayas and the slopes of Shiwaliks.
    - Its width is 8 to 16 km.
    - All streams disappear in this belt due to porous rocks.
  - 2. **Terai:** This region is wet, swampy and marshy because the streams re-emerge in this region.
    - Before, partition, it had thick forests and large number of wildlife.
    - Moreover, this region has a national park i.e. Dudhwa National Park.
  - 3. **Bhangar** (old Alluvium): This region contains old alluvium soil.
    - It lies above the flood plains of the rivers and presents a terrace-like feature.
    - Furthermore, the soil in this region contains calcareous deposits (kankar).
  - 4. **Khadar** (New Alluvium): The younger deposits of the floodplains are called khadar.
    - They are renewed almost every year and so are fertile, thus ideal for intensive agriculture.
    - Besides, fine silt and clay is found in khadar region.

## The Peninsular Plateau:

• The Peninsular Plateau is a tableland composed of the <u>old crystalline</u>, igneous and metamorphic rocks.

- Indian peninsula was once the part of Gondwana land (Super continent). Thus, known as the oldest landmass of India.
- The plateau has broad and Shallow valleys (not deep) and rounded hills.
- Indian plateau has two broad divisions:-
  - 1. Central Highlands
  - 2. Deccan Plateau.

### The Central Highlands:

- 1. Central Highlands lie to the **north of Narmada** river (also known as Reva) and cover the major part of Malwa Plateau.
- 2. **Malwa Plateau** and **the Chota nagpur plateau** together forms the Central Highlands.
- 3. **Rivers** drain the Malwa Plateau are:-**Mahi, Betwa, Ken, Chambal etc.** River mainly drains the Chotanagpur plateau is the **Damodar.**
- 4. The eastward extensions of this plateau are locally known as the **Bundelkhand** and **Baghelkhand**.
- 5. The Central Highlands are wider in the west but narrower in the east.

**Note:** Narmada river flows between two ranges; **Vindhyan range** (north) and **Satpura range** (south).

There is another range called **Aravali** which marks the northwest border of the Central Highlands.

6. The **slope** of the central highlands are from **south-west to north-east.** 

#### **The Western Ghats**

- 1. Western Ghats lie parallel to the western coasts.
- 2. They are **continuous** and can be crossed through passes only.
- 3. The average elevation of Western Ghats is 900-1600 metres.

#### **Deccan Plateau**

- 1. The Deccan Plateau is a triangular landmass that lies to the **south of** the river **Narmada**.
- 2. It is the single largest plateau in India.
- 3. Rivers drain the Deccan Plateau are **Godavari, Krishna** and **Kaveri.**
- 4. The extension of the Plateau is also visible in the northeast, locally known as Meghalaya, lateau Karbi-Anglong Plateau and North Cachar Hills.

Three **prominent ranges** from west to east are the **Garo**, **the Khasi** and **the Jaintia Hills** (parts of Assam and Meghalaya).

5. The Deccan Plateau is bounded by the ghats; **eastern ghats** and **western ghats**.

Note: It has Satpura range on its north and Mahadev, the Kaimur hills and the Maikal range in the eastward direction.

6. The **slope** of the Deccan plateau is **eastward.** 

#### The Eastern Ghats

- 1. Eastern Ghats lie parallel to eastern coastal plains.
- 2. The Eastern Ghats are **discontinuous** and irregular (uneven pattern) and cut apart by rivers draining into the Bay of Bengal.
- 3. The **average elevation** of Eastern Ghats is **600 metres.**

#### The Western Ghats

### 4. Its height increases from north to south.

The highest peaks include the Anai Mudi (2,695 m) and Doda Betta (2,637 m)

5. Western Ghats **stretch** from **Gujarat** (Satpura Range) to Tamil Nadu Ghats cause orographic rainfall.

#### The Eastern Ghats

4. Its height increases from **south of north**. The **highest peak** is **Mahendragiri** (1,501)

5. The Eastern Ghats **stretch** from **Odisha** (the Mahanadi Valley) to Tamil Nadu (the Nilgiris). (Kanyakumari). In Addition, the Western Besides, Shevroy Hills and the Javedi Hills are located to the Southeast of the Eastern Ghats.

## The Indian Desert:

- The Indian desert lies towards the western margins of the Aravali Hills.
- It is an undulating (shape like wave) sandy plain covered with sand dunes.
- Due to scanty rainfall (150 mm per year) this region is dry (arid region) and has less vegetation.
  - Low rainfall areas in Rajasthan: Ruyli in Jaisalmer, Bikaner etc.
- Streams appear during rainy seasons.
- In fact, Luni (river) is a single large river in the western part (Rajasthan).

## The Coastal Plains:

- The areas deposited with sediments near the sea are coastal plains.
- They run along the Arabian Sea on the west and the Bay of Bengal on the east.

#### Western Coastal Plains

- 1. Western Coastal Plains lie between the Western Ghats and Arabian Sea.
- 2. These are narrow.
- 3. These plains are divided into three sections.
- a. Northern Part: Konkan (Mumbai-Goa)
- b. Central Part: Kannad Plain.
- c. Southern Part: Malabar coast.
- 4. Rivers in this coast are Narmada, Tapi, Mandavi etc.

#### **Eastern Coastal Plains**

- 1. Eastern Coastal Plains lie between the Eastern Ghats and the Bay of Bengal.
- These are wide.
- 3. These plains are divided into two parts;
- a. Northern Part: Northern Circar.
- b. Southern Part: the Coromandel Coast.
- 4. Large rivers, such as the Mahanadi, the Godavari, the Krishna and the Kaveri have formed extensive delta on this coast.

## The Islands:

• India has 1,382 islands.

- However, there are two major island groups in India
  - 1. The Andaman and Nicobar Islands a?? Capital Port Blair.
    - These Islands lie close to equator and experience equatorial climate.
    - They have thick forest cover.
    - Also, Indiaâ??s only active volcano is found on Barren island in Andaman and Nicobar group of Islands.
  - 2. The Lakshadweep Islands a?? Capital Kavaratti.
    - It covers small area of 32 sq. km.
    - Interestingly, Before 1973, Lakshadweep was known as Laccadive, Minicoy and Amindive.
    - Kavaratti Island is the administrative headquarters of Lakshadweep.
    - In Addition, there is bird sanctuary in Pitti island.

# Importance of Indiaâ??s physical features:

- The mountains are the major sources of water and forest wealth.
- The northern plains are the granaries of the country.
- The plateau is a storehouse of minerals.
- The coastal region and island groups provide sites for fishing and port activities.

#### Category

1. Class 9th

#### **Date**

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