

One Liner Shots (The Himalayas: Part I)



Indian Physiography

- ❖ India showcases a wide array of physical features, and this diversity is a consequence of its extensive landmass formed over different geological epochs and the myriad geological and geomorphological processes that have shaped its crust.
- ❖ As per the **Plate Tectonic theory**, pivotal processes like folding, faulting, and volcanic activity have played a central role in shaping the physical attributes of India's landscape.
- ❖ For instance, the formation of the **Himalayan mountain range** in the northern region is attributed to the **convergence of the Gondwana landmass with the Eurasian plate**.
- ❖ The northern part of India is characterized by an expansive, **rugged topography** comprising a series of mountain ranges with varying peaks, picturesque valleys, and deep gorges.
- ❖ On the other hand, the southern part of the country features **stable tablelands** with intricately dissected plateaus, exposed rock formations, and well-developed scarps.
- ❖ Situated between these two distinct landscapes lies the extensive and fertile expanse known as the **Great Northern Plains**.

The Himalayas

The Himalayas are one of the youngest fold mountain ranges in the world of tectonic origin and comprise mainly sedimentary rocks. They stretch from the Indus River in the west to the Brahmaputra River in the east. It consists of three parallel ranges: Himadri (Greater Himalayas), Himachal (Lesser Himalaya), and Shivaliks (Outer Himalaya).

Classification of the Himalayas (Along the width)

<p>Outer Himalaya or Shivalik</p> <ul style="list-style-type: none">• Shivaliks, or the Outer Himalaya, is of recent origin with an average elevation of 900-1200m, with a relatively steeper slope towards the south.• It runs for a distance of 2,400 km from the Potwar Plateau to the Brahmaputra Valley.• The southern slopes are steep, while the northern slopes are gentle.• The Himalayan Frontal Thrust (HFT) or the Main Frontal Thrust (MFT) is a geological fault in the Himalayas that defines the boundary between the Indian and Eurasian Plates.• The width of the Shivaliks varies from 50 km in Himachal Pradesh to less than 15 km in Arunachal Pradesh.• Chos can be found here.	<p>Lesser Himalaya or Himachal</p> <ul style="list-style-type: none">• Himachal, or Lesser Himalaya, has an average height of 3700-4500m.• The important ranges are Dhauladhar, Pir Panjal, Nag Tibba, and Musoorie.• Famous hill resorts are Shimla, Ranikhet, Almora, Nainital, and 'Doon or Doar' are special features of this range bordering the outer Himalayas.• The Pir Panjal range in Kashmir is the longest and the most important.• The main Boundary Thrust separates the outer Himalayas from the lesser Himalayas.
<p>The greater Himalayas or Himadri</p> <ul style="list-style-type: none">• Having an average elevation of 6100m, Himadri, or the Greater Himalayas, includes some of the highest peaks and some of the important passes like Jelep La in the Chumbi Valley in Sikkim and Shipki La in the Sutlej Valley.• The highest peak of the Himalayas, Mt. Everest or Sagarmatha, lies in Nepal.• The average elevation is 6100m above sea level• The average width is 25km	<p>The Trans Himalaya</p> <ul style="list-style-type: none">• Trans Himalayan Zones lie to the North of the Great Himalayas bordering Tibet.• Some important ranges of this zone are Karakoram, Ladakh, and Zaskar.• This is the largest snow field outside the polar region.• It is also called the Tibetan Himalayas because most of it lies in Tibet.• The Zaskar, the Ladakh, the Kailas, and the Karakoram are the main ranges.• Great Karakoram Range, also known as the Krishnagiri Range.

Some Interesting One-liner Facts about the Himalayas

- ★ The Himalayas are **young fold mountains** that form India's northern boundary
- ★ The Himalayas are divided based on two lines: one is longitudinal, and another is from west to east.
- ★ The Himalayas consist of a series of parallel mountain ranges that form an arc, which covers a distance of about **2500 km**.
- ★ The width varies from 400 km in the west to 150 km in the east.
- ★ The eastern part has greater altitudinal variations than the western part.
- ★ On the basis of longitudinal extent, the Himalayas consist of **3** parallel ridges: The Greater Himalayas or Inner Himalayas or Himadri; the Lesser Himalayas or Himachal and the Outer Himalayas or Shivalik.
- ★ The Greater Himalayas have the most continuous ranges, and these consist of the loftiest peaks with an average height of **6000m** and above.
- ★ The folds of the Great Himalayas are **asymmetrical** in nature.
- ★ The longest range of this system is the **Pir Panjal Range**.
- ★ The **Pir Panjal range** consists of the famous valley of **Kashmir**.
- ★ The Longitudinal Valley between the lesser Himalayas and Shivaliks are commonly called **Duns**- for example, Dehra Dun, Kotli Dun, and Patli Dun.
- ★ The highest peak of the Himalayas is **Everest**, Nepal (8848 m)
- ★ Other than this, there are peaks such as Kanchenjunga, India (8598 m) and Makalu, Nepal (8481m)
- ★ The Himalayas have two syntaxial bends. One in the Nanga Parbat in the northwest and the other in the Namcha Barwa in the northeast.
- ★ **Main Central Thrust (MCT)** is between the Greater Himalayas and Lesser Himalayas
- ★ **The Main Boundary Thrust (MBT)** is between the Lesser Himalayas and the Shivalik Himalayas
- ★ **Himalayan Frontal Thrust (HFF)** is between the Shivalik Himalayas and the Northern Plains

