

**(i) The Peninsular Block:**

**Peninsular Block Extension:**

- The northern boundary of the Peninsular Block - line running from Kachchh along the western flank of the Aravali Range near Delhi and then roughly parallel to the Yamuna and the Ganga as far as the Rajmahal Hills and the Ganga delta.
- KarbiAnglong and Meghalaya Plateau in the northeast and Rajasthan in the west are also extensions of this block.
- The north-eastern parts are separated by Malda fault in West Bengal from Chotanagpur plateau.

**(i) Peninsular block formation**

- The Peninsula is formed by a great complex of very ancient gneisses and granites, which constitutes a major part of it.
- As a part of the Indo-Australian Plate, it has been subjected to various vertical movements and block faulting. The rift valleys of the Narmada, the Tapi and the Mahanadi and the Satpura block mountains are some examples of it.
- The Peninsula mostly consists of relict and residual mountains like the Aravali hills, the Nallamala hills, the Javadi hills, the Veliconda hills, the Palkonda range and the Mahendragiri hills, etc.
- The river valleys here are shallow with low gradients. Most of the **East flowing** rivers form deltas before entering into the Bay of Bengal. The deltas formed by the Mahanadi, the Krishna, the Kaveri and the Godavari are important examples.

**(ii) The Himalayas and other Peninsular Mountains**

- The Himalayas are young, weak and flexible in their geological structure unlike the rigid and stable Peninsular Block.
- Consequently, they are still subjected to the interplay of exogenic and endogenic forces, resulting in the development of faults, folds and thrust planes.
- These mountains are tectonic in origin, dissected by fast-flowing rivers which are in their youthful stage.

- Various landforms like gorges, V-shaped valleys, rapids, waterfalls, etc. are indicative of this stage.

**(iii) Indo-Ganga-Brahmaputra Plain**

- The third geological division of India comprises the plains formed by the river Indus, Ganga and Brahmaputra.
- Originally, it was a geo-synclinal depression which attained its maximum development during the third phase of the Himalayan mountain formation approximately 64 million years ago.
- Since then, it has been gradually filled by the sediments brought by the Himalayan and Peninsular rivers.
- The relief and physiography of India has been greatly influenced by the geological and geomorphological processes active in Indian subcontinent.

**Physiography:**

- Physiography of an area is the outcome of structure, process and the stage of development.
- The north has a vast expanse of rugged topography consisting of a series of mountain ranges with varied peaks, beautiful valleys and deep gorges.
- The south consists of stable table land with highly dissected plateaus, denuded rocks and developed series of scarps.
- In between these two lies vast north Indian plain.

**Based on these macro variations, India can be divided into following physiographic divisions:**

- A) The Northern and North-eastern Mountains
- B) The Northern Plain
- C) The Peninsular Plateau
- D) The Indian Desert
- E) The Coastal Plains
- F) The Islands.

**A. The North and North-eastern Mountains**

- The North and North-eastern Mountains consist of Himalayas and the North-eastern hills.