

Chapter 02: Structure and Physiography.

The Peninsular block:- Kachha, western Aravali, parallel to Ganga & the Yamuna upto Rajmahal hills & Karbi Anglong and Meghalaya Plateau (separated by Malwa fault).

- consist of ancient gneiss & schist.
- rift valley. Narmada, Tapi Mahanadi. "satpura-block mts"
- Relict and Residual mts - Aravali, Nallamala hills, The & Tavadi hills, viliconda hills, Palkonda hills, Mahendragiri hills.

The Himalayas and other peninsular mountains.

Tectonic in origin, youthful stage of rivers, gorges, V shaped valleys, rapids, waterfalls.

Indo-Ganga - Brahmaputra Plain - originally it was a geo-synclinal depression which attained a maximum development during the third phase of Himalayan mountain formation, about 64 million years ago.

Physiography:- outcome of structure process and stage.

(A) The North and North eastern mountains.

- General orientation is from North west to South east in North western part, in Darjiling & to the east lie in eastward direction.
- in Arunachal they are from South west to North west direction.
- In Meghalaya, Manipur & Mizoram, North South direction.
- 2,500 km East to West (Central Aravali Range). width varies from 100 - 400 kms.

Barak river is tributary of Meghna.
flows in eastern part of Manipur and the tributaries
of Chindwin which in turn is a tributary of the
Irrawaddy of Myanmar.

2) The Northern Plains:

extent - 3,200 kms, width - 150 - 300 km. Elevation - 50 - 150 m

Bhabar, Tarai & Alluvial plains → Khadar
↳ Bangar.

Bhabar - narrow belt ranging between 8-10 km parallel to
the Shiwalik foothills at the break up of the slope. Heavy
stream deposition, resulting sometimes disappearance of streams.

Tarai - marshy low swampy land south of Bhabar where
stream re-emerges.

Bangar - old Alluvium

Khadar - new Alluvium

These plains have features of mature
stage of fluvial erosion and deposition
landforms - sand bars, meanders, oxbow
lakes and braided channels.

The Peninsular Plateau:

extent - Delhi ridge in Northwest, Rajmahal hills in east
Tiro Range in west and Cardamom hills in south.

extremes - Sullong and Karbi Aylong Plateaus

Patland Plateaus - Hazaribagh Plateau, Palamu Plateau
Ranchi Plateau, Malwa Plateau, Coimbatore Plateau &
Kannada Plateau.

general elevation is from west to east.

Important physiographic features of this region are
Tors, block mountains, rift valleys, spurs, base leveling
structures, series of hummocky hills and well developed
quartzite dykes offering natural sites for water
storage. Black soil & western & north western part
- Shimo fault.