

## Ch-2 STRUCTURE AND PHYSIOGRAPHY

### Key points

- The northeastern part of the Kashmir Himalayas is a cold desert- Ladakh.
- The Kashmir Himalayas are also famous for Karewa formations, which are useful for the cultivation of Zafran, a local variety of saffron.
- Most of tribal communities in Arunachal Himalayas practise Jhumming. It is also known as shifting or slash and burn cultivation.

### Describe the three geological divisions of India.

- THE PENINSULAR BLOCK:
  - It is formed of very ancient gneisses and granites,
  - It has been standing like a rigid block.
  - its western coast is submerged beneath the sea.
  - it consists of relict and residual mountains like the Aravali hills,
- THE HIMALAYAS AND OTHER MOUNTAINS
  - They are young, weak and flexible in their geological structure.
  - These mountains are tectonic in origin, dissected by fast-flowing rivers which are in their youthful stage.
- INDO-GANGA-BRAHMAPUTRA PLAIN
  - The plains are formed by the river Indus, the Ganga and the Brahmaputra.
  - Originally, it was a depression which has been gradually filled by the sediments.
  - Average depth of alluvial deposits in these plains ranges from 1,000-2,000 m.

### Describe the features of the North and Northeastern Mountains

- They consist of a series of parallel mountain ranges such as Great Himalayas and the Shivalik.
- The approximate length is 2,500 km from east to west, and their width varies between 160-400 km from north to south.
- they stand almost like a strong and long wall between the Indian subcontinent and the Central and East Asian countries.
- Important sub-divisions are: (i) Kashmir or Northwestern Himalayas (ii) Himachal and Uttarakhand Himalayas (iii) Darjiling and Sikkim Himalayas (iv) Arunachal Himalayas (v) Eastern Hills and Mountains.

### Describe the features of The Northern Plains

- They are formed by the alluvial deposits brought by the rivers – the Indus, the Ganga and the Brahmaputra.
- These plains extend approximately 3,200 km from the east to the west. The average width of these plains varies between 150-300 km.
- The maximum depth of alluvium deposits varies between 1,000-2,000 m.
- From the north to the south, these can be divided into three major zones: the Bhabar, the Tarai and the alluvial plains.
- The alluvial plains can be further divided into the Khadar and the Bhangar.
- These river valley plains have a fertile alluvial soil and hence, supports a large population.

### Describe the features of The Indian Desert

- To the northwest of the Aravali hills lies the Great Indian desert.
- It is a land of undulating topography dotted with longitudinal dunes and barchans.
- This region receives low rainfall below 150 mm per year; hence, it has arid climate with low vegetation cover.

- It is because of these characteristic features that this is also known as Marusthali.
- It is believed that during the Mesozoic era, this region was under the sea.
- Most of the rivers in this region are ephemeral. The Luni river flowing in the southern part of the desert.

#### Distinguish between the two types of Coastal Plains

- Coastal plain are of two types: (i) the western coastal plains; (ii) the eastern coastal plains.
  - (i) the western coastal plains
    - The western coastal plains are submerged.
    - It has natural conditions for the development of ports and harbours. Eg. Kandla port.
    - The rivers flowing through this coastal plain do not form any delta.
    - It is known by different names such as Kathiawar coast, Konkan coast etc.
    - Backwaters of 'Kayals' are used for fishing, inland navigation.
  - (ii) the eastern coastal plains
    - The eastern coastal plain is broader and is an example of an emergent coast.
    - There are welldeveloped deltas here, formed by the rivers flowing eastward in to the Bay of Bengal.
    - Because of its emergent nature, it has less number of ports and harbours.
    - The continental shelf extends up to 500 km into the sea, which makes it difficult for the development of good ports and harbours.

#### Distinguish between the two major Islands group of India.

- There are two major island groups in India –
- Andaman and Nicobar islands in the Bay of Bengal:
  - The island groups consist of about 572 islands/islets.
  - The Andaman in the north and the Nicobar in the south are separated by Ten degree channel.
  - These islands are an elevated portion of submarine mountains.
  - Some smaller islands are volcanic in origin. Eg. Barren island
- Lakshadweep and Minicoy islands of Arabian Sea:
  - These islands are located at a distance of 280 km-480 km off the Kerala coast.
  - The entire island group is built of coral deposits.
  - There are approximately 36 islands of which 11 are inhabited.
  - Minicoy is the largest island with an area of 453 sq. km.