
Physical Features of India

Question 1: Choose the right answer from the four alternatives given below.

(i) A landmass bounded by sea on three sides is referred to as

- (a) Coast
- (b) Island
- (c) Peninsula
- (d) none of the above

Answer: (c) Peninsula

(ii) Mountain ranges in the eastern part of India forming its boundary with Myanmar are collectively called as

- (a) Himachal
- (b) Uttarakhand
- (c) Purvachal
- (d) none of the above

Answer: (c) Purvanchal

(iii) The western coastal strip, south of Goa is referred to as

- (a) Coromandel
- (b) Konkan
- (c) Kannad
- (d) Northern Circar

Answer: (b) Kannad

(iv) The highest peak in the Eastern Ghats is

- (a) Anai Mudi
- (b) Kanchenjunga
- (c) Mahendragiri
- (d) Khasi

Answer: (c) Mahendragiri

Question 2: Answer the following questions briefly.

(i) What are tectonic plates?

Answer (i): Large fragments of the Earth's crust torn due to the rising currents are called tectonic plates

(ii) Which continents of today were part of the Gondwana land?

Answer (ii): South America, part of Africa (South Africa including Madagascar), part of Asia (India, Arabia, Malaya), Australia and Antarctica continents were parts of the Gondwana land.

(iii) What is the *bhabar*?

Answer (iii): The Bhabar is that narrow belt of the plain which is covered with pebbles and lies along the foothills of the Shiwaliks from the Indus to the Teesta.

(iv) Name the three major divisions of the Himalayas from north to south.

Answer (iv): The Great or the Inner Himalayas or the Himadri, the Middle Himalayas or the Himachal, and the Outer Himalayas or the Shivaliks.

(v) Which plateau lies between the Aravali and the Vindhyan ranges?

Answer (v): The Malwa plateau lies between the Aravali and the Vindhya Ranges.

(vi) Name the island group of India having coral origin.

Answer (vi): Lakshadweep Islands is the island group of India having coral origin

Question 3: Distinguish between

(i) Converging and diverging tectonic plates

Answer (i):

| Converging Tectonic Plates | Diverging Tectonic Plates |
|---|---|
| When tectonic plates move towards each other, they are called converging plates. | When tectonic plates move away from each other, they are called diverging plates. |
| They collide or crumble or one of them slides under the other while moving towards each other. | They do not collide or crumble while moving away from each other. |
| Converging plates cause folds. | Diverging plates cause fractures in the crust. |

(ii) *Bhangar and Khadar*

Answer (ii):

| Bhangar | Khadar |
|---|---|
| These are the older alluvium or old soil and form the largest part of the Northern Plains. | The newer and younger deposits of the flood plains. Renewed every Year. |
| Lies above flood plains of rivers. | Is newer, younger deposit of flood |



| | |
|---|--|
| Presents a terrace like feature. | Contains calcerous deposits locally known as Kankar. |
| Less fertile | More fertile |

(iii) Western Ghats and Eastern Ghats

Answer (iii):

| Western Ghats | Eastern Ghats |
|--|--|
| Mark the western edge of the Deccan Plateau | Mark the eastern edge of the Deccan Plateau |
| Continuous, can be crossed through the passes only. | Discontinuous, irregular and dissected by rivers draining into the Bay of Bengal. |
| Higher; average elevation is 900–1600 meters | Lower; average elevation is 600 meters |
| This range is a source of many large rivers. | No big river originates from this range. |
| It experiences orographic rain mostly in summer due to the summer monsoons. The climate is hot and moist. | It receives rain both in summer and winter, especially in winter through winter monsoons. However, here the rain is lesser than the western strip. |
| Soil is highly fertile. Rice, spices, rubber and fruits like coconuts, cashew nuts etc. are grown | Soil is not as fertile as western ghats. Rice, ground nuts, cotton, tobacco, coconuts etc. are grown |

Question 4: Describe how the Himalayas were formed.

Answer: According to the Theory of Plate Tectonics, the Earth's crust was initially a single, giant super-continent called Pangea. Its northern part was the Angara land and the southern part was the Gondwana land. The convectional currents split the crust into a number of pieces, thus leading to the drifting of the Indo-Australian plate after being separated from the Gondwana land, towards north. The northward drift resulted in the collision of the plate with the much larger Eurasian Plate. Due to this collision, the sedimentary rocks which were accumulated in the geosyncline known as the Tethys were folded to form the mountain system of western Asia and Himalaya.

Question 5: Which are the major physiographic divisions of India? Contrast the relief of the Himalayan region with that of the Peninsular plateau.

Answer: The major physiography divisions of India are:

- (i) The Himalayan Mountains
- (ii) The Northern Plains
- (iii) The Peninsular Plateau



- (iv) The Indian Desert
- (v) The Coastal Plains
- (vi) The Islands

| The Himalayan Region | The Peninsular Plateau |
|---|---|
| Young fold mountains made from the uplift of the strata formed by the sedimentary rocks. | Created from igneous and metamorphic rocks after splitting of Gondwanaland. |
| Consists of the loftiest mountains and deep valleys | Consists of broad and shallow valleys, and rounded hills |
| The ranges have I-shaped and U-shaped valleys. | It has horsts, rift valleys and troughs. |
| It is the origin of perennial rivers. | It has rainfed, seasonal rivers. |
| From the point of view of geology, this region forms an unstable zone | This region forms a stable zone |

Question 6: Give an account of the Northern Plains of India.

Answer: The Northern Plains have been formed from the alluvium that the mountain rivers deposited here. This turned the soil on the surfaced land fertile for growing a rich harvest of variety of crops. This led to the development of the Indus River Valley Civilisation. The rich soil was further aided by favourable climate and constant water supply from the rivers. Between the mouths of the Indus and the Ganga-Brahmaputra, the North Indian Plain covers a distance of 3200 km. It is 300 to 150 km wide at some places. The North Indian Plains have the Indus river system in the west and the Ganga-Brahmaputra river system in the east. The first includes Jhelum, Chenab, Ravi, Beas, Satluj. The Indus flows into the Arabian Sea. The second includes Ganga, its tributaries and the Brahmaputra which combine as Meghna as they drain into the Bay of Bengal. They form the world's largest and fastest growing delta. The difference in relief has led the North Indian Plains to be divided into four zones:

- (i) Bhabhar,
- (ii) Tarai,
- (iii) Bangar and,
- (iv) Khadar.

Question 7: Write short notes on the following.

- (i) The Indian Desert

Answer (i): The Indian desert lies towards the western margins of the Aravali Hills. It is an undulating sandy plain covered with sand dunes called barchans. This region receives very low rainfall below 150 mm per year (15 cm). It has arid climate with low vegetation cover. Streams appear during the rainy season. Soon after they disappear into the sand as they do not have enough water to reach the sea. Luni is the only large river in this region.

(ii) The Central Highlands

Answer (ii): The part of the peninsular plateau lying to the north of the Narmada River covering a major area of the Malwa plateau is known as the Central Highlands. The Vindhyan range is bounded by the Central Highlands on the south and the Aravali range on the northwest. The flow of the rivers draining this region, namely the Chambal, the Sind, the Betwa and Ken is from southwest to northeast, thus indicating the slope. The Central Highlands are wider in the west but narrower in the east. The eastward extensions of this plateau are locally known as the Bundelkhand and Baghelkhand. The Chotanagpur plateau marks the further eastward extension, drained by the Damodar River.

(iii) The Island groups of India

Answer (iii): India has 2 main island groups, namely Lakshadweep and Andaman and Nicobar island.

The Lakshadweep consists of many small islands located opposite the Kerala coast in the Arabian Sea. The islands of this group are formed of coral deposits called 'atolls' in Malayalam which refer to their ring or 'horse-shoe' shape. The Andaman and Nicobar Islands, on the other hand, are larger in size. They are more in number and more widely scattered.

There are about 200 islands in the Andaman group and 19 islands in the Nicobar group.

MAP SKILLS

On an outline map of India show the following.

- (i) Mountain and hill ranges – the Karakoram, the Zaskar, the Patkai Bum, the Jaintia, the Vindhya range, the Aravali, and the Cardamom hills.
- (ii) Peaks – K2, Kanchenjunga, Nanga Parbat and the Anai Mudi.
- (iii) Plateaus, Chotanagpur and Malwa
- (iv) The Indian Desert, Western Ghats, Lakshadweep Islands



Answer:

