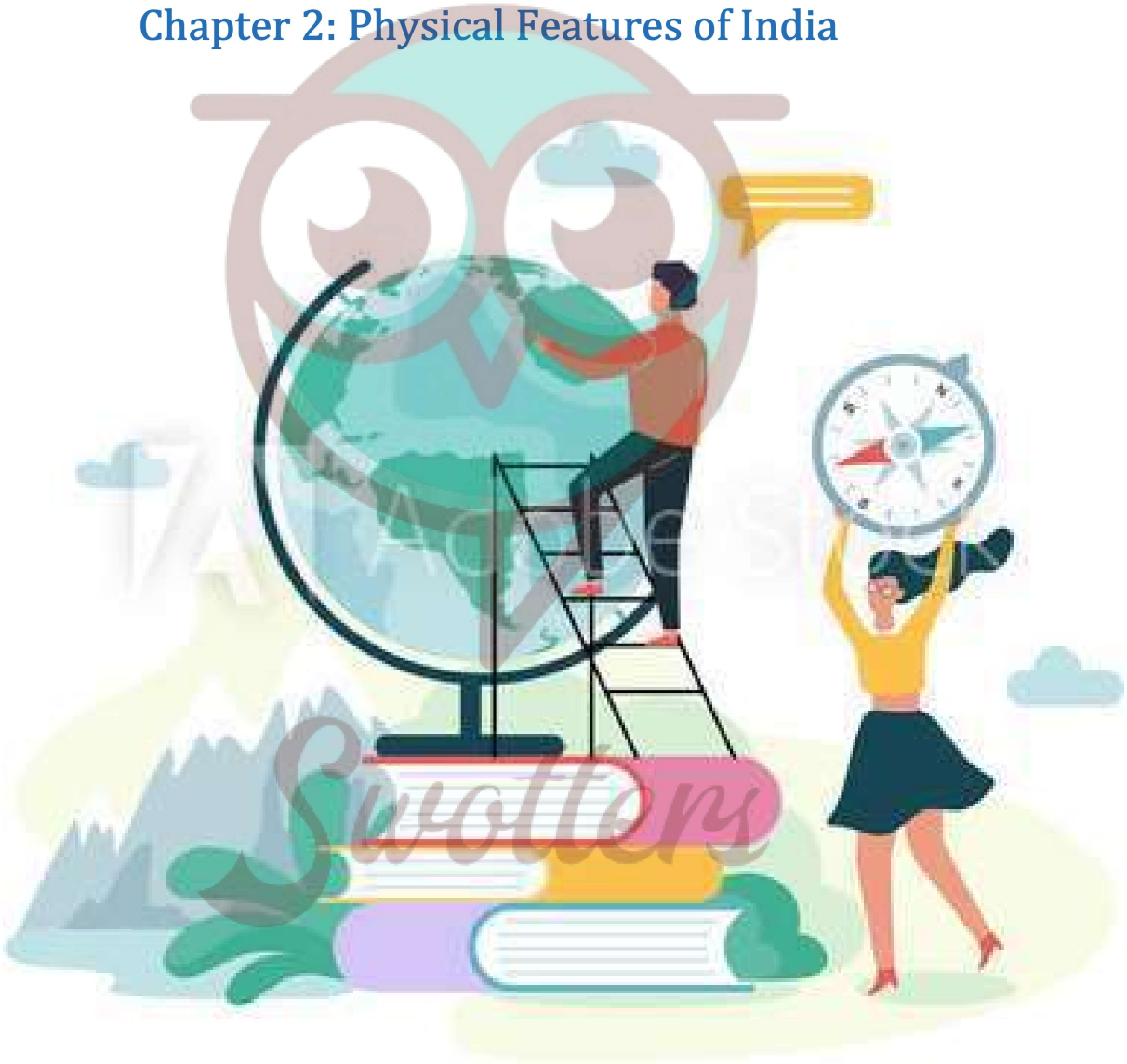
# GEOGRAPHY

## Chapter 2: Physical Features of India



# Important Questions

## Multiple Choice questions-

Question 1. Lakshadweep Islands are a group of …… Islands.

(a) 36

(b) 32

(c) 39

(d) 38

Question 2. Mountain ranges in the eastern part of India forming its bound¬ary with Myanmar are collectively called-

(a) Himachal

(b) Purvanchal

(c) Uttaranchal

(d) None of the above

Question 3. The western Coastal strip, south of Goa is referred to as-

(a) Coromandel

(b) Malabar

(c) Konkan

(d) Northern Circar

Question 4. Shipkila, Bhor, Nathula and Pal are-

(a) Peaks

(b) Passes

(c) Ranges

(d) None of the above

Question 5. Guru Shikhar is the highest peak of the-

(a) Aravallis

(b) Vindhya

(c) Satpura

(d) Western Himalayas

Question 6. Northern Plains are composed of ……

(a) Black Soil

(b) Kankar

(c) Alluvium

(d) Igneous rocks

Question 7. ..... lies between Mahanadi and Krishna.

(a) Godavari

(b) Kaveri

(c) Tapti

(d) Kosi

Question 8. Gulf of Khambat lies in the .....

(a) Indian Ocean

(b) Bay of Bengal

(c) Arabian Sea

(d) None of the above

Question 9. ..... range is between the Narmada and the Tapti rivers.

(a) Satpura

(b) Ajanta

(c) Vindhya

(d) Aravalli

Question 10. The peaks of ' Himadri' range have an average height of ..... metres.

(a) 3,000

(b) 6,000

(c) 5,000

(d) 8,000

Question 11. The average width of the Himadri range is ..... km.

(a) 40

(b) 30

(c) 30

(d) 60

Question 12. The minimum height of the Shiwaliks is ..... metres.

(a) 800

(b) 1,100

(c) 700

(d) 900

Question 13. The maximum height of the 'Himadri' range is …… metres.

(a) 3,700

(b) 4,500

(c) 3,900

(d) 4,200

Question 14. The northern plain is about …… to …… km broad.

(a) 240 to 320

(b) 260 to 320

(c) 230 to 340

(d) 240 to 360

Question 15. The plains of …… India are very fertile and densely populated.

(a) Southern

(b) Northern

(c) Western

(d) Eastern

## Very Short Questions:

1. Physical Features of India
2. Give the reason for variation of soil colour at different places.
3. Name the processes which have created and modified the relief to its present state.
4. What is the Theory of Plate Tectonics? [CBSE 2014]
5. What happens when two tectonic plates collide with each other?
6. Which are the three types of plate boundaries/movements? [HOTS]
7. Mention any six tectonic plates of the earth's crust.
8. What is the implication of plate movements?
9. Where do most of volcanoes and earthquakes happen?
10. Name the oldest part of the Indian landmass.

## Short Questions:

1. What are the three types of plate movements on the earth?
2. Give a brief description of the Himalayan mountains.
3. Explain in brief the famous passes of the Himalayas.
4. List some major Mountain Peaks of the Himalayas.
5. Give an account of the four divisions of Himalayas from west to east along with Purvachal hills.
6. Mention divisions of Northern Plains marked by rivers.
7. Write some important features of Ganga Plains.

## Long Questions:

1. Describe the three parallel ranges of the Himalayas.
2. Mention the significance of Himalayas. [HOTS]
3. Classify the Northern plains on the basis of the variations in the relief features.
4. Mention the significance of Northern Plains of India.
5. How do the physical divisions of India complement each other?

## Assertion Reason Questions:

1. In the following questions, a statement of Assertion (A) followed by a statement of Reason (R) is given. Choose the correct option out of the choices given below each question.

   **Assertion (A) :** Purvanchal is located on the Eastern Part of India.

   **Reason (R) :** It is a submountain range of the Himalayas in the North-East India.

   A) Both A and R are true and R is the correct explanation of A.

   B) Both A and R are true, but R is not the correct explanation of A.

   C) A is true, but R is false.

   D) A is false, but R is true.

2. In the following questions, a statement of Assertion (A) followed by a statement of Reason (R) is given. Choose the correct option out of the choices given below each question.

   **Assertion (A) :** The Northern plains are agriculturally very productive part of India.

   **Reason (R) :** The Northern plains have fertile soil cover, adequate water supply, favourable climate and terrain.

   A) Both A and R are true and R is the correct explanation of A.

   B) Both A and R are true, but R is not the correct explanation of A.

   C) A is true, but R is false.

D) A is false, but R is true.

## Case Study Based Question:

1. Read the source and answer the following questions.

The Himalayas, geologically young and structurally fold mountains stretch over the Northern borders of India. These mountain ranges run in a West-East direction from the Indus to the Brahmaputra. The Himalayas represent the loftiest and one of the most rugged mountains barriers of the world. They form an arc, which covers a distance of about 2400 km. Their width varies from 400 km in Kashmir to 150 km in Arunachal Pradesh. The altitudinal variations are greater in the Eastern half then those in the Western half. The Himalayas consists of three parallel ranges in its longitudinal extent. A number of valleys lie between these ranges. The Northern-most range is known as the Great or Inner Himalayas or the Himadri. It is the most continuous range consisting of the loftiest peaks with an average height of 6,000 metres. It contains all prominent Himalayan peaks.

(1) Which of the following is the unstable landmass of India?

A) The Peninsular Plateau

B) The Great Indian Desert

C) The Himalayas

D) None of the above

(2) Which of the following is the source of the Ganges river?

A) The Peninsular Plateau

B) The Western Ghats

C) The Himalayas

D) The Eastern Ghats

(3) Path Dun is a part of..... range of the Himalayas.

A) Himachal

B) Himadri

C) Purvanchal

D) Shiwalik

(4) Why are the Himalayas considered as a youthful topography?

A) The Himalayas have high mountain peaks.

B) The Himalayas have deep valleys.

C) The Himalayas have fast flowing rivers.

D) AII of the above

2. Read the source and answer the following questions.

The Northern Plain is broadly divided into three sections. The Western part of the Northern Plain is referred to as the Punjab Plains. Formed by the Indus and its tributatries, the larger part of this plain lies in Pakistan. The Indus and its tributaries - the Jhelum, the Chenab, the Ravi, the Beas and the Satluj originate in the Himalaya. This section of the plain is dominated by the doabs. Doab' is made up of two words - 'do' meaning two and 'ab' meaning water. Similarly 'Punjab' is also made up two words -'Punj' meaning five and 'ab' meaning water.

The Ganga plain extends between Ghaggar and Teesta rivers. It is spread over the states of North India, Haryana, Delhi, Uttar Pradesh, Bihar, partly Jharkhand and West Bengal to its East, particularly in Assam lies the Brahmaputra plain. The Northern plains are generally described as flat land with no variations in its relief. It is not true. There vast plains also have diverse relief features. According to the variations in relief features, the Northern plains can be divided into four regions. The rivers, after descending from the mountains deposit pebbles in a narrow belt of about 8 to 16 km in width lying parallel to the slopes of the Shiwaliks. It is known as bhabar. All the streams disappear in this bhabar belt. South of this belt, the streams and rivers re-emerge and create a wet, swampy and marshy region known as Terai. This was a thickly forested region full of wildlife. The forests have been cleared to create agricultural land and to settle migrants from Pakistan after partition.

(1) The fertility of the Northern plain is the result of:

A) Action of glaciers

B) Adequate rainfall

C) Its level land

D) Depositional work of the rivers

(2) Which of the landmass of India is densely populated?

A) The Himalayas

B) The Peninsular Plateau

C) The Northern Plains

D) None of the above

(3) Find the incorrect option.

A) Western part of Northern plain-Punjab plain

B) Punjab plain-Deals

C) Jhelum river-Tributary of Ganga river

D) Ganga plain-Between Ghaggar and Taesta rivers

(4) Why is rivers disappear in the bhabar belt?

A) It is thickly forested land

B) It is a porous region due to deposition of huge number of pebbles and rock debris.

C) It is a swampy region.

D) None of the above

# Answer Key:

## MCQ

1. (a) 36
2. (b) Purvanchal
3. (c) Konkan
4. (b) Passes
5. (c) Satpura
6. (b) Kankar
7. (a) Godavari
8. (c) Arabian Sea
9. (a) Satpura
10. (c) 5,000
11. (a) 40
12. (b) 1,100
13. (b) 4,500
14. (d) 240 to 360
15. (b) Northern

## Very Short Answer:

1. Hard rock like marble has been used for making the Taj Mahal and soft rock like soap stone is us for making talcum powder.

2. The reason for variation of soil colour is that the soil is formed out of different types of rocks.

3. The processes are weathering, erosion and deposition.

4. The Theory of Plate Tectonics states that the earth's crust has been formed out of seven major and some minor plates. The movement of these plates results in folding, faulting and volcanic activity.

5. When two plates collide with each other, it can lead to folding, faulting and volcanic activity.

6. The three types of plate boundaries includes convergent, divergent and transform boundary.

7. The six tectonic plates of the earth's crust are Eurasian plate, North American plate, South American plate, African plate, Indo-Australian plate and Pacific and Antarctic plate.

8. The plate movements have changed the size and position of the continents over million years. These movements have also influenced the evolution of present landforms.

9. Most of them are happened at plate margins but some also occur within the plates.

10. The peninsular plateau is the oldest landmass of India.

## Short Answer:

**Ans: 1.** The three types of plate movements are the following.

(a) Converging Boundary: When the plates come towards each other, they form convergent boundaries. ' The plates collide, crumble or even slide under the other. It may also be known as folding

movements. For example, Himalayas mountains were formed by convergence of IndoAustralian plate against Eurasian plate.

(b) Divergent Boundary: These are formed when the plates move away from each other, they form divergent boundary. They are also called faulting movements. For example, the North American Plate diverge from the Eurasian Plate.

(c) Transform Boundary: When some plates move past each other form transform boundary, i e.g. San Andreas fault. The western half of California is moving north because it is part of the Pacific Pla and Eastern half of California is moving south because it is part of North America.

**Ans: 2.** The three types of plate movements are the following.

(a) Converging Boundary: When the plates come towards each other, they form convergent boundaries. ' The plates collide, crumble or even slide under the other. It may also be known as folding

movements. For example, Himalayas mountains were formed by convergence of IndoAustralian plate against Eurasian plate.

(b) Divergent Boundary: These are formed when the plates move away from each other, they form divergent boundary. They are also called faulting movements. For example, the North American Plate diverge from the Eurasian Plate.

(c) Transform Boundary: When some plates move past each other form transform boundary, i e.g. San Andreas fault. The western half of California is moving north because it is part of the Pacific Pla and Eastern half of California is moving south because it is part of North America.

**Ans: 3.** A pass is a natural pathway in between high mountains. The Himalayan mountains are so formidable that it is not possible to cross them. There are some passes in the Himalayas which

provide route-way across them. Some of the important passes are:

(a) Shipki La located in Satluj valley in Himachal Pradesh along Tibet border.

(b) Lipu Lekh pass near Tibet border in Uttarakhand providing route to Mt. Kailash and Mansarowa in Tibet.

(c) In the east, there is Nathu La pass in Sikkim and China border providing passage from India to Lhasa and Bomdi la pass La Arunachal-China border.

**Ans: 4.** The Greater Himalayas or Himadri has the tallest peaks of the world. Many peaks are more than 8000 metres above sea level and remain snow bound throughout the year. Some of them are as follows:

(a) Mount Everest or Sagarmatha is 8848 m high located in Nepal is the world's highest peak.

(b) Kanchenjunga (8598 m) is the second highest peak in the Himalayas. It is in Sikkim in India.

(c) Nanga Parbat (8126 m) lies in Kashmir and Nanda Devi (7817 m) in Uttarakhand are the other two peaks.

(d) Namcha Barwa (7756 m), an important peak on the border of Arunachal Pradesh and Tibet.

**Ans: 5.** The four divisions of Himalayas from west to east are:

(a) Punjab Himalayas: They lie between Indus and Satluj rivers. They are also known locally as Kashmir and Himachal Himalayas from west to east.

(b) Kumaon Himalayas: These Himalayas lie between Satluj and Kali rivers.

(c) Nepal Himalayas: These Himalayas lie between Kali and Tista rivers.

(d) Assam Himalayas: These Himalayas lie between Tista and Dihang rivers.

Purvachal Hills: These are the north-eastern extension of Himalayas. Beyond the Dihang gorge, the Himalayas bend sharply to the South and spread along the north-eastern boundary of India.

They are mainly composed of strong sandstones. The important hills are the Patkai, the Naga, the Manipur and the Mizo hills.

**Ans: 6.** The Northern Plains of India are fertile alluvial plains. The division of Northern plains marke by river are:

(a) Indus Plains: Indus plain formed by River Indus and its tributaries e.g. Jhelum, Chenab, Ravi, Bea and Satluj.

(b) Ganga Plains: The plain formed by River Ganga and its tributaries such as Yamuna, Ghaghara, Gandak, Kosi etc. It extends between Ghaggar and Teesta rivers. It covers the states of Haryana, Delhi, Uttar Pradesh, Bihar, Jharkhand and West Bengal.

(c) Brahmaputra Plains: The plains lies in the east mainly in Assam. These are very narrow plains

drained by Brahmaputra and its tributaries

**Ans: 7.** Some important features of Ganga Plains are:

(a) The Ganga Plain lies in Uttar Pradesh, Bihar, Haryana, Delhi and West Bengal. The deltaic part of the plain is in West Bengal and Bangladesh. This part of the plain is formed by Ganga and its Himalayan tributaries (Yamuna, Ghaghara, Gandak) and Peninsular tributaries (Chambal, Betwa, Ken and Son).

(b) The plain slopes towards east and southeast and also has high fertile soils.

(c) These plains extended between Ghaggar and Teesta rivers.

## Long Answer:

**Ans: 1.** The three parallel ranges of the Himalayas are:

(a) Himadri (Greater or Inner Himalayas): It is the most continuous range of the Himalayas. It has loftiest peaks with an average height of 6000 metres. For example, Mount Everest 8848 metres, Kanchenjunga 8598 metres. The folds of this part are asymmetrical in nature. It is perennially snow bound and gives rise to a number of perennial rivers e.g. Ganga rises from Gangotri glacier.

(b) Himachal (Lesser Himalayas): These ranges lie south of Himadri and forms the most rugged ranges. These ranges are mainly composed of highly compressed and altered rocks. The average height of the lesser Himalayas is between 3700 and 4500 metres. The important ranges are the Pir Panjal, the Dhaula Dhar and the Mahabharat. This range consists of the famous valley of Kashmir, the Kangra and the Kullu Valley. This range is also famous for its hills stations like Mussoorie, Nainital, Ranikhet, Shimla. This range is also famous for its fruit orchards.

(c) Shiwaliks (Outer Himalayas): These ranges extend over a width of 10-50 km and height between 900 and 1100 metres. These ranges are made up of unconsolidated mud and rocks brought down by the Himalayan rivers. These ranges are more prone to landslides and earthquakes. They are more prominent in the western part of India. The longitudinal valleys lying between lesser Himalayas and the Shiwaliks are called 'Duns' like Dehra dun, Kotli Dun and Path Dun etc.

**Ans: 2.** The significance of Himalayas are as follows:

(a) The Himalayas act as a climatic divide. They do not allow the cold winds from Central Asia to come into India nor do they allow the monsoons to escape into Central Asia.

(b) They are storehouse of forest wealth and wildlife.

(c) They give rise to perennial rivers e.g. River Ganga.

(d) They have a number of places of tourist attraction i.e. hill stations (Shimla, Nainital, Srinagar etc).

(e) They are also famous for the river valleys, e.g. Kashmir valley drained by Jhelum river and

fruit orchards.

(f) They also are well known for the glaciers like Siachen, the highest battlefield.

**Ans: 3**. The Northern Plains are alluvial plains formed by deposition of sediments brought down by rivers from the mountains. On the basis of the variation in relief of the northern plains it can be divided into four regions.

(a) Bhabar: The rivers, after descending down from the mountains, deposit pebbles in a narrow belt of 8-16 km lying parallel to the slopes of the Shiwaliks. This is known as bhabar. The streams disappear in this belt.

(b) Terai: Below the Bhabar belt, the streams and rivers re-emerge and create a wet, swampy and marshy region called terai. It was a thickly forested area rich in wildlife. But now the area is cleared for cultivation.

(c) Bhangar: It is the largest part of the northern plains made up of older alluvium. This region lie above the flood plains of the rivers and present a terrace-like feature. The soil is not fertile here, it contains calcareous deposits called kankar.

(d) Khadar: The newer, younger deposits of the flood plains found in the lower river valley and at the mouth of the river. These are very fertile and get renewed every year by annual floods. They are suitable for intensive cultivation.

**Ans: 4.** The significance of Northern Plains are:

(a) The Northern Plains of India are drained by Rivers Indus, Ganga and Brahmaputra along with their tributaries. Thus, these plains are very fertile and are rich source of food grains in India so known as granaries of the world.

(b) The plains are densely populated. A number of religious places are also there, e.g., Varanasi, Rishikesh, Haridwar etc.

(c) These is presence of a number of perennial rivers, e.g. Ganga, Yamuna etc. provide water for irrigation.

(d) They have a dense network of transport such as railways and roadways.

(e) They provide the base for early civilisations.

**Ans: 5.** Each physiographic region is unique in itself, but inspite of their differences they are interdependent on each other. They complement one another, in the following sense:

(a) The Northern mountains are a rich source of water and forest resources.

(b) The Northern Plains with fertile soil are the granaries for the whole country.

(c) The Peninsular plateau is the storehouse of mineral wealth, so it is a base of manufacturing industries.

(d) The coastal plains provide sites for fishing and port activities.

(e) The island groups have a unique diversity in flora and faura.

**Conclusion:** None of these regions can exist without the other. Therefore, there is a geographical unity between these different regions. In other words there is a kind of unity in diversity that exists in India.

## Assertion Reason Answer:

1. A) Both A and R are true and R is the correct explanation of A.
2. A) Both A and R are true and R is the correct explanation of A.

## Case Study Answer:

1. **Answer:**

   (1) C) The Himalayas

   (2) C) The Himalayas

   (3) D) Shiwalik

   (4) D) AII of the above

2. **Answer:**

   (1) D) Depositional work of the rivers

   (2) C) The Northern Plains

   (3) C) Jhelum river-Tributary of Ganga river

   (4) B) It is a porous region due to deposition of huge number of pebbles and rock debris.