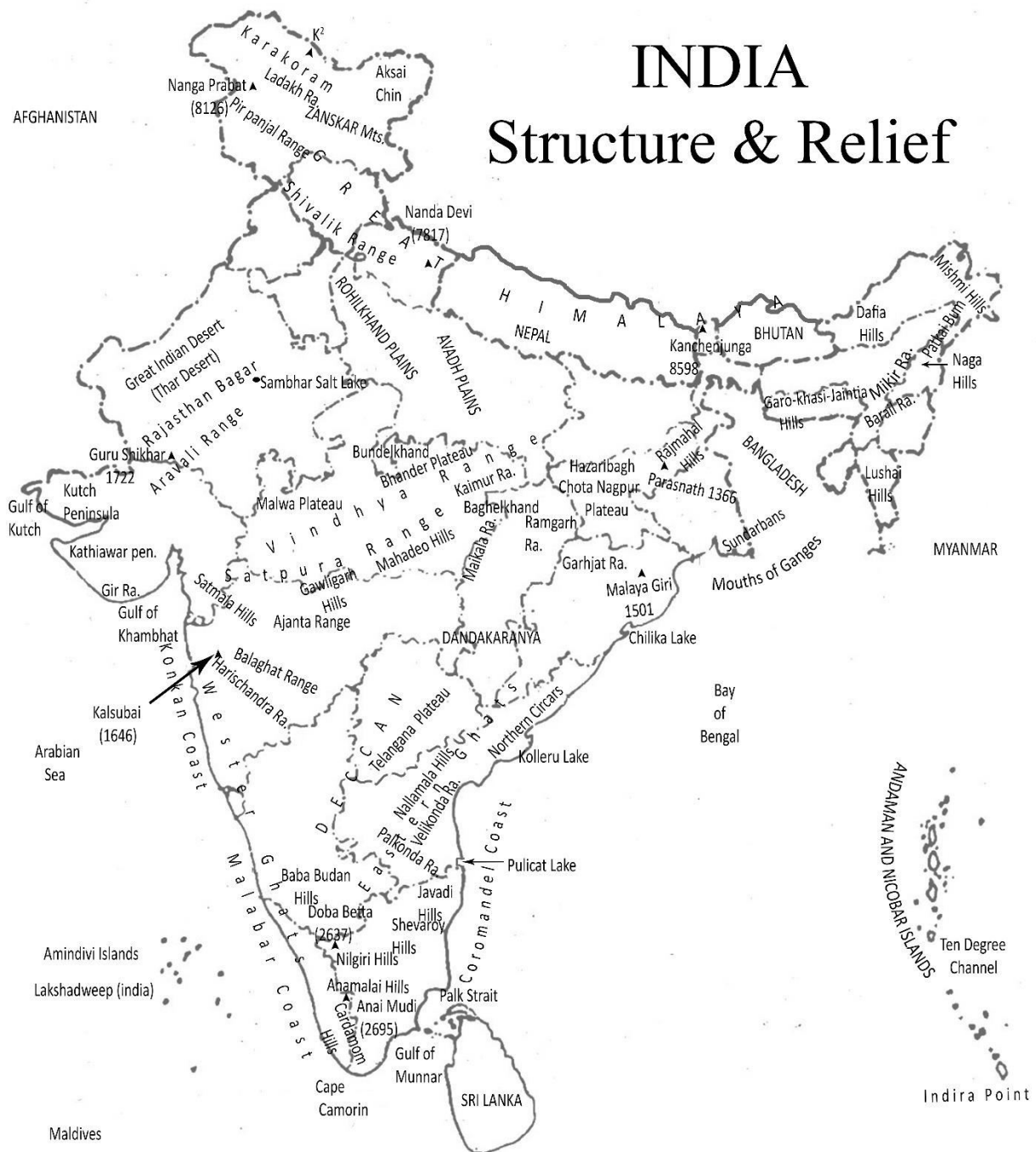


## INDIA STRUCTURE AND RELIEF (PHYSIOGRAPHIC DIVISIONS)



India is divided into three physiographic divisions:

1. The Northern Mountains
2. The Great Plains
3. The Peninsular India

### THE NORTHERN MOUNTAINS

The Northern Mountains consists of the following mountain ranges:

Name	Information
Karakoram range	<ul style="list-style-type: none"> <li>▪ Extends from the Pamir Knot.</li> <li>▪ 600 km long with an average width of 120–140 km.</li> <li>▪ Ancient name: Krishnagiri.</li> <li>▪ Abode of Siachen and Baltoro glaciers.</li> <li>▪ Highest peak: K2 or Godwin Austin (8611 m).</li> <li>▪ River Indus and its tributary Shyok are located south of Karakoram range.</li> </ul>
Ladakh range	<ul style="list-style-type: none"> <li>▪ Located between River Indus and Shyok.</li> <li>▪ Highest peak: Mt. Rakaposhi.</li> </ul>
Zaskar range	<ul style="list-style-type: none"> <li>▪ It serves as the boundary line between the Ladakh region and the Jammu region and Kashmir Valley.</li> <li>▪ Zoji La Pass is located on this range.</li> </ul>
Purvanchal range	<ul style="list-style-type: none"> <li>▪ Extension of the Himalayas.</li> <li>▪ Further divided into mountain ranges such as               <ul style="list-style-type: none"> <li>• Purva-NEFA (Mishmi Hills, Dafla Hills, Patkai Bum)</li> <li>• Mizoram Hills (also called Lushai Hills)</li> <li>• North Cachar Hills (Barail range), etc.</li> </ul> </li> </ul>

The Himalayas are the most important part of Northern Mountains. They are further sub-divided into three ranges as follows:

Name	Information
Greater Himalayas or Himadri	<ul style="list-style-type: none"> <li>▪ Northern most part of Himalayan range.</li> <li>▪ World's highest landform with an average altitude of 6100 m.</li> <li>▪ Highest peak: Mt. Everest (8848 m) in Nepal.</li> <li>▪ Other peaks: Kanchenjunga (8598 m) in Sikkim, Nanga Parbat (8126 m) in Jammu and Kashmir.</li> <li>▪ Famous passes: Shipki La (Himachal Pradesh), Lipu Lekh (Uttarakhand), Nathu La (Sikkim), Bomdi La (Arunachal Pradesh). "La" refers to pass through a mountain range. Pass facilitates movement of goods and people.</li> </ul>
Lesser Himalayas or Himachal	<ul style="list-style-type: none"> <li>▪ North of Shiwalik range. Separated from Shiwalik range by Duns. For example, Dehradun, Kothridun, etc.</li> <li>▪ Contains two subranges:               <ul style="list-style-type: none"> <li>• Pir Panjal range, which extends from River Jhelum in Kashmir to River Beas in Himachal Pradesh.</li> <li>• Dhauladhar range, which is the southern part of Lesser Himalayas in Himachal Pradesh and Uttarakhand.</li> </ul> </li> </ul>

Shiwalik range	<ul style="list-style-type: none"> <li>▪ Extends from Indus in Jammu and Kashmir (150 km width) to Brahmaputra in Arunachal Pradesh (8–15 km wide). The width of the Himalayas reduces from Jammu and Kashmir to Arunachal Pradesh.</li> <li>▪ Also called Sub Himalayas or Outer Himalayas.</li> <li>▪ These are the youngest part of the Himalayas.</li> </ul>
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Classification of the Himalayas on the basis of geographical location:

Name	Location	Distance
Punjab Himalaya	Between Indus and Sutlej	560 km
Kumaon Himalaya	Between Sutlej and Kali	320 km
Nepal Himalaya	Between Kali and Teesta	800 km
Assam Himalaya	Between Teesta and Brahmaputra	720 km

A valley is defined as a low area of land (flat in topography) between mountains, typically with a river or stream flowing through it. As valleys are levelled, they are inhabited by people and used for agricultural activities.

Name	Information
Alakananda Valley	Uttarakhand
Barak Valley	Assam
Chamba Valley	Chamba, Himachal Pradesh
Chumbi Valley	The valley is in Tibet (China); The valley is adjoining Sikkim (India) and Bhutan.
Dzukou Valley	Manipur and Nagaland
Zoji La Valley	Jammu and Kashmir
Kangra Valley	Himachal Pradesh
Kullu Valley	Kullu district, Himachal Pradesh
Lahaul Valley	Himachal Pradesh
Mandakini Valley	Kedarnath, Uttarakhand
Niti Valley	Chamoli district, Uttarakhand
Neora Valley	Kalimpong, Darjeeling, West Bengal
Nubra Valley	North-east of Ladakh Valley
Pin Valley	Himachal Pradesh
Sangla Valley	Kinnaur district, Himachal Pradesh
Spiti Valley	Himachal Pradesh (India) and Tibet (China)
Tons Valley	Garhwal region, Uttarakhand
Valley of Flowers	Uttarakhand

### **Karewas**

The Kashmir valley is an intermountain valley surrounded by mountains such as Pir Panjal Range from all the sides. Jhelum and its tributaries pass through the valley.

Over the years, the rivers have deposited sediments. These sediments are brought from glaciers of Kashmir. These deposits of sediments give appearance of succession of plateaus. Some of them are nearly 400 m thick. These plateau-like terraces are called 'Karewas' or 'Vudr' in the local language. They are used to cultivate Zaffron, a type of saffron which is pretty expensive and has high demand overseas.

## THE NORTHERN PLAINS

The Northern Plains are the largest alluvial tract of land in the world. An alluvial tract refers to the land formed by alluvial soil. This soil is made up of fertile sand, known as alluvium, brought by rivers and deposited in plains.

These plains extend from the mouth of Indus to the mouth of Ganga and Brahmaputra. The east-west extent of these plains is 2400 km (3200 if the Indus plains are included) and average width is 150–300 km.

Alluvial soil is further divided into following types:

- 1. Bhabar:** After descending from the mountains, the rivers deposit pebbles in a narrow belt. The width of this belt is about 8–16 km, and it exists parallel to the Shiwaliks. The streams flowing from the Himalayas disappear in this region because streams hide under pebble deposits when flowing through this belt.
- 2. Terai:** The Terai region is located south of the Bhabar belt. In this region, streams reappear and make wet, marshy place.
- 3. Khadar:** It is the new alluvium and is deposited by annual floods, which enriches the soil by depositing fine silt.
- 4. Bhangar:** Bhangar represents old alluvium, deposited away from the flood plains. When new Khadar is brought by rivers, Khadar replaces Bhangar and takes its place. Both the Khadar and Bhangar soils contain calcareous concretions (made up of calcium carbonate) called kankars.

The Great Plains are subdivided into the following categories:

Name	Information
Rajasthan Plains	<ul style="list-style-type: none"> <li>▪ They are 650 km long with an average width of 250–300 km.</li> <li>▪ The Aravalli range divides the Rajasthan Plains into two parts: the area to the east of Aravalli is called Mewar and the area to the west is called Marwar.</li> <li>▪ The Great Indian Desert is the westernmost region of these plains.</li> <li>▪ A semi-arid plain lying to the east of Thar Desert is called Rajasthan Bagar.</li> <li>▪ Luni is the only south-west flowing river of this region.</li> <li>▪ Sambhar Lake is the largest lake lying north to the Luni basin.</li> </ul>

Punjab Haryana Plains	<ul style="list-style-type: none"> <li>▪ Extends from Punjab and Haryana in the west to River Yamuna in the east.</li> <li>▪ These plains are primarily made up of Doabs, the land between two rivers.</li> <li>▪ These are composed of Khadar plains locally called Bets.</li> </ul>
Ganga Plains	<ul style="list-style-type: none"> <li>▪ They stretch from Delhi to Kolkata across Uttar Pradesh, Bihar, and West Bengal.</li> <li>▪ Rivers such as Ganga, Yamuna, Gomti, Kosi, Son, etc. deposit large amounts of alluvium to make it fertile.</li> </ul>
Brahmaputra Plains	<ul style="list-style-type: none"> <li>▪ Between East Himalayas in the north, Patkai and Naga Hills in the east, Garo–Khasi–Jaintia and Bangladesh border in the south.</li> </ul>

## THE PENINSULAR INDIA

The Peninsular India is broadly categorized into three parts:

1. Peninsular mountains
2. Peninsular plateau
3. Coastal plains

### 1. Peninsular mountains

Name	Information
The Aravalli range	<ul style="list-style-type: none"> <li>▪ The total length is 700 km.</li> <li>▪ Separates the semi-desert regions of Rajasthan from the fertile regions of Udaipur and Jaipur.</li> <li>▪ One of the oldest fold mountains of the world.</li> <li>▪ Highest peak: Guru Shikhar (1722 m).</li> </ul>
The Vindhya range	<ul style="list-style-type: none"> <li>▪ Separates northern India from the southern mainland.</li> <li>▪ Adjoining Vindhyas, River Narmada flows in the rift valley.</li> <li>▪ Acts as a natural division between rivers of northern and southern India.</li> </ul>
Satpura range	<ul style="list-style-type: none"> <li>▪ To the south of Vindhyas, between the Narmada and Tapi rivers.</li> <li>▪ Highest peak: Dhupgarh (1350 m), near Pachmarhi.</li> <li>▪ Important hill ranges that are part of Satpura range are Rajpipala (in Gujarat), Mahadeo (in Madhya Pradesh) and Maikala range (Madhya Pradesh, Chhattisgarh).</li> </ul>
Maikala range	<ul style="list-style-type: none"> <li>▪ Situated in Madhya Pradesh and Chhattisgarh.</li> </ul>

	<ul style="list-style-type: none"> <li>Highest peak: Mt. Amarkantak. Amarkantak is the source of two important rivers: Son and Narmada.</li> </ul>
Sahyadris (Western Ghats)	<ul style="list-style-type: none"> <li>Total length is about 1600 km and average height is about 1200 m.</li> <li>They run along the western coastal plain from south of valley of Tapi to Kanyakumari.</li> <li>Acts as a watershed for peninsular rivers. Sahyadris determines the flow of rivers in South India. Rivers in South India flow from the western part of India towards the eastern part.</li> <li>The highest peak of Western Ghats is Anai Mudi and the highest peak of Western Ghats up to Nilgiri Hills is Kalsubai.</li> </ul>
Eastern Ghats	<ul style="list-style-type: none"> <li>Run along the eastern coast of India from northern Odisha to Nilgiri Hills.</li> <li>Prominent ranges are <ul style="list-style-type: none"> <li>Nallamala Hills</li> <li>Velikonda Hills</li> <li>Palkonda Hills</li> </ul> </li> <li>Highest peak: Mahendragiri (1501 m).</li> <li>Araku Valley is located in the Eastern Ghats. It is a hill station in Vishakhapatnam district in the state of Andhra Pradesh. It is inhabited by different tribes and is famous for coffee cultivation.</li> </ul>
Ajanta, Balaghat, Harishchandra, and Satmala ranges	<ul style="list-style-type: none"> <li>These local ranges emerge from Western Ghats.</li> <li>Highest peak: Kalsubai (1646 m), located in Harish Chandra range.</li> </ul>
Nilgiri Hills	<ul style="list-style-type: none"> <li>Meeting point of Eastern and Western Ghats. Thus, Nilgiri Hills are regarded as knot.</li> <li>Separated from southern hills by a gap called the Palghat gap.</li> <li>Highest peak: Doda Betta (2637 m).</li> </ul>
Anamala or Anaimalai Hills, also known as the Elephant Hills	<ul style="list-style-type: none"> <li>Highest peak: Anai Mudi (2695 m). It is also the highest peak of Western Ghats as well as South India.</li> </ul>
Cardamom Hills	<ul style="list-style-type: none"> <li>Situated in the extreme south of Peninsular India.</li> </ul>
Rajmahal Hills	<ul style="list-style-type: none"> <li>Situated in the north-eastern edge of Chota Nagpur plateau</li> <li>Highest peak: Parasnath (1366 m).</li> </ul>

## 2. Peninsular Plateau

Bundelkhand, Bhandar, Baghelkhand, and Malwa plateau	<ul style="list-style-type: none"> <li>▪ Situated to the north of Narmada rift valley.</li> <li>▪ They are of volcanic origin and are composed of black soil.</li> </ul>
Meghalaya plateau	<ul style="list-style-type: none"> <li>▪ Comprises Garo, Khasi, and Jaintia Hills.</li> <li>▪ Originally a part of peninsular plateau.</li> <li>▪ Garo–Rajmahal Gap separates it from the main plateau.</li> </ul>
Chota Nagpur plateau	<ul style="list-style-type: none"> <li>▪ Covers much of Jharkhand state as well as adjacent parts of Odisha, West Bengal, Bihar and Chhattisgarh.</li> <li>▪ Consists of Ranchi plateau, Hazaribagh plateau, Rajmahal Hills, and Ramgarh Hills.</li> <li>▪ It is known as “Ruhr of India” because of its mineral wealth. ‘Ruhr’ is the mineral rich region of Germany.</li> </ul>
Deccan plateau	<p>Situated in the south of the Satpura range. Consists of three regions:</p> <ul style="list-style-type: none"> <li>▪ The Deccan lava plateau region or called the Deccan Trap: Northwest part of the Deccan plateau. It is a region composed of lava. Includes regions of Madhya Pradesh, Saurashtra region in Gujarat, Maharashtra, and Karnataka.</li> <li>▪ Telangana plateau, now a separate state.</li> <li>▪ Rayalseema plateau, part of the remaining Andhra state.</li> <li>▪ The Karnataka plateau: Located to the south of Deccan lava region. Baba Budan Hills are located in the Karnataka plateau. These hills are rich in iron ore.</li> </ul>

### 3. Coastal Plains

Name	Information
West Coastal Plains	<ul style="list-style-type: none"> <li>▪ Runs from Rann of Kutch to Kanyakumari.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Confined to a narrow belt of about 10–15 km width.</li> <li>▪ Divided into the following subcategories: <ul style="list-style-type: none"> <li>• Kathiawar coast: Extends from Rann of Kutch to Daman in the south.</li> <li>• Konkan coast: Between Daman in the north and Goa in the south.</li> <li>• Malabar coast: Between Goa in the north to Kanyakumari in the south.</li> </ul> </li> <li>▪ Western coast is predominantly an example of the coast of submergence. <b>Submergent coastlines</b> are the stretches along the coast that have been inundated by the sea by a relative rise in sea levels.</li> </ul>
East Coastal Plains	<ul style="list-style-type: none"> <li>▪ Extends from the delta of Ganga in the north to Kanyakumari in the south. The length is 1100 km, and the average width is 100–130 km. They are broader than the West Coastal Plains.</li> <li>▪ Divided into the following subcategories: <ul style="list-style-type: none"> <li>• Utkal coast: Extends from a little north of River Subarnarekha to Mahanadi in the south. These are mainly coastal plains of Odisha.</li> <li>• Andhra Coastal Plains: Extend from the southern limit of Utkal to Pulikat (Pulicat) lake in Andhra Pradesh; consist of deltas of Krishna and Godavari rivers.</li> <li>• Tamil Nadu Plains: Extend from the north of Chennai to Kanyakumari in the south. They are known as the “Granary of South India”. They receive winter rainfall every year due to the retreating monsoon.</li> </ul> </li> </ul>

## OTHER IMPORTANT PHYSICAL FEATURES OF INDIA

### 1. Gulfs

Name	Separates	Location	Information
Gulf of Kutch	Kutch and Kathiawar Peninsula	Gujarat	High potential of tidal energy generation.
Gulf of Khambhat	Saurashtra region from the rest of Gujarat	Gujarat	Tapi, Narmada, Mahi, and Sabarmati rivers drain into it.
Gulf of Mannar	Sri Lanka and southern	South-east of Tamil Nadu	Asia's first marine biosphere



	India		reserve.
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## 2. Lakes and Lagoons

Name	State/UT	Information
Kayals (Backwaters)	Kerala	<ul style="list-style-type: none"> <li>Chain of lakes connected by canals.</li> </ul>
Vembanad (Backwater)	Kerala	<ul style="list-style-type: none"> <li>It is the largest Kayal.</li> </ul>
Chilika (lagoon, salt water)	Odisha	<ul style="list-style-type: none"> <li>Formed on account of Mahanadi delta and water currents from the Bay of Bengal.</li> <li>South of Mahanadi delta.</li> <li>Largest brackish water lake in Asia.</li> </ul>
Wular Lake (fresh water)	Jammu and Kashmir	<ul style="list-style-type: none"> <li>One of the largest freshwater lakes in Asia.</li> <li>The lake basin was formed as a result of earthquake and was fed by River Jhelum.</li> </ul>
Kolleru (fresh water)	Andhra Pradesh	<ul style="list-style-type: none"> <li>Formed between deltas of Godavari and Krishna rivers.</li> <li>The lake has a number of islands within.</li> </ul>
Pulicat Lake (lagoon, salt water)	Andhra Pradesh	<ul style="list-style-type: none"> <li>Southern border of Andhra Pradesh.</li> <li>Sriharikota Island separates it from the Bay of Bengal.</li> </ul>
Jai Samand Lake or Dhebar Lake (fresh water)	Rajasthan	<ul style="list-style-type: none"> <li>Largest artificial (fresh water) lake of India.</li> </ul>
Loktak Lake (fresh water)	Manipur	<ul style="list-style-type: none"> <li>Largest freshwater lake in North East India and is famous for the phumdis floating over it.</li> <li>Phumdis are a series of floating islands, exclusive to the Loktak Lake in Manipur state, in North East India.</li> <li>Keibul Lamjao is the only floating national park in the world.</li> </ul>
Sambhar Lake (inland salt water)	Rajasthan	<ul style="list-style-type: none"> <li>Largest lake of Rajasthan.</li> <li>Inland saline water lake.</li> <li>Large-scale salt extraction.</li> <li>Didwana and Kuchaman are other important inland salt (saline) lakes in Rajasthan.</li> </ul>
Pangong Tso (inland salt water lake)	Ladakh	<ul style="list-style-type: none"> <li>Located in Ladakh Region; 60% of lake is under the control of China.</li> <li>Freezes during winters.</li> </ul>

		<ul style="list-style-type: none"> <li>▪ Land-locked lake, does not form part of Indus Basin.</li> </ul>
Kanwar Lake (oxbow lake)	Bihar	<ul style="list-style-type: none"> <li>▪ Largest oxbow lake in India and in Asia</li> <li>▪ Formed due to the meandering of Gandak river, a tributary of Ganga</li> <li>▪ Freshwater lake located in the Begusarai district</li> <li>▪ Only Ramsar site in Bihar.</li> </ul>

### How Was Lake Chilika Formed?

Mahanadi, which brings silt into the lake, controls the northern end of the lake. A 60 km long barrier beach, called Rejhansa, formed by the northerly currents in the Bay of Bengal resulted in the formation of this shallow lake. The water surface area varies from 1165 km<sup>2</sup> in the summer monsoon season to 906 km<sup>2</sup> in the winter dry season.

## Practice Questions

1. Match India's mountain passes with their location in the respective states.

Pass	State/UT
1. Nathu La Pass	a. Uttarakhand
2. Lipu Lekh Pass:	b. Jammu and Kashmir
3. Rohtang La Pass:	c. Sikkim
4. Zoji La Pass:	d. Himachal Pradesh

Select the correct answer using the codes given below:

- (a) 1-a, 2-c, 3-b, 4-d
- (b) 1-c, 2-a, 3-b, 4-d
- (c) 1-c, 2-a, 3-d, 4-b
- (d) 1-a, 2-c, 3-d, 4-b

2. Consider the following statements:

- 1. The continental shelves of Lakshadweep originated due to coral reefs.
- 2. The continental shelves of western coast are due to faulting and submergence.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

3. Consider the following statements with regard to eastern and western coastal plains of India.

- 1. The former is emergent, whereas the latter is submergent in nature.
- 2. The former provides better natural conditions for the development of the ports than the latter.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

4. Which one of the following island groups in South Asia are formed of coral polyps?

- 1. Andaman
- 2. Amindivi
- 3. Maldives
- 4. Minicoy

Select the correct answer using the codes given below:

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 1, 2 and 3

(d) 2, 3, and 4

5. With reference to the kayals of Kerala, consider the following statements:

1. They are soft water lagoons formed by the rivers just before flowing into the Arabian Sea.
2. The Vembanad Kayal is the largest one, and unlike others, it is completely made of brackish water.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

6. Which of the following have volcanic origin?

1. Andaman and Nicobar Islands
2. Lakshadweep
3. Deccan Trap
4. Aravalli ranges

Select the correct answer using the codes given below:

- (a) 1, 2, and 3 only
- (b) 2 and 4 only
- (c) 1 and 3 only
- (d) 1, 2, 3, and 4

7. In which of the following are corals not found?

- (a) Gulf of Kutch
- (b) Gulf of Khambat
- (c) Gulf of Mannar
- (d) None of the above

8. What is the correct sequence of occurrence of the following mountain ranges of South India as one proceeds from north to south?

1. Palkonda Hills
2. Shevaroy Hills
3. Javadi Hills
4. Palani Hills

Select the correct answer using the codes given below.

- (a) 1-2-3-4
- (b) 3-1-2-4
- (c) 3-2-4-1
- (d) 1-3-2-4

9. Where is the Aghil Pass located?

- (a) Nepal Himalayas
- (b) Sikkim Himalayas
- (c) Eastern Himalayas
- (d) Trans Himalayas

10. Structurally, the Meghalaya region is a part of

- (a) Shiwalik range
- (b) Deccan plateau
- (c) Greater Himalayas
- (d) Aravalli range

11. Which one of the following has the highest elevation above the mean sea level?

- (a) Parasnath
- (b) Pachmarhi
- (c) Dodabetta
- (d) Anai Mudi

12. Which of the following statements is **not** correct?

- (a) The Western Ghats are relatively higher in their northern region.
- (b) Anai Mudi is the highest peak in the Western Ghats.
- (c) River Tapi lies to the south of Satpura.
- (d) Narmada and the Tapi rivers flow in rift valleys.

13. From the north to the south, which one of the following is the correct sequence of hill ranges?

- (a) Nallamala Hills–Nilgiri Hills–Javadi Hills–Anaimalai Hills
- (b) Anaimalai Hills–Javadi Hills–Nilgiri Hills–Nallamala Hills
- (c) Nallamala Hills–Javadi Hills–Nilgiri Hills–Anaimalai Hills
- (d) Anaimalai Hills–Nilgiri Hills–Javadi Hills–Nallamala Hills

14. Consider the following pairs:

- 1. Girnar Hills : Gujarat
- 2. Nallamala Hills : Andhra Pradesh
- 3. Shevaroy Hills : Tamil Nadu

How many of the pairs given above is/are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

15. Deserts, fertile plains, and moderately forested mountains are the characteristic features of which one of the following regions of India?

- (a) South-western border along the Arabian Sea

- (b) Coromandel coast
- (c) North-eastern frontier
- (d) North-western India

16. Consider the following regions:

1. North-eastern Madhya Pradesh
2. Western part of Telangana
3. Central Rajasthan

Which of the above regions is/are semi-arid?

- (a) 1 and 2
- (b) 2 only
- (c) 2 and 3
- (d) 3 only

17. Consider the following pairs:

Hills	Region
1. Garo Hills	Northeast India
2. Javadi Hills	Central India
3. Maikal Hills	South India

How many of the above pairs is/are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

18. Which one of the following pairs is **not** correctly matched?

- (a) Volcanic lake: Lonar
- (b) Lagoon: Pulicat
- (c) Fresh water: Chilika
- (d) Glacial lake: Verinag

19. Consider the following:

1. Jammu Hills
2. Mikir Hills
3. Zaskar range

How many of the above given mountain ranges receive rainfall of more than 100 cm?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

20. In which one of the following is the Himalayan pass Shipki La located?

- (a) Chandra Valley

- (b) Hunza Valley
- (c) Nubra Valley
- (d) Sutlej Valley

21. With reference to the Great Himalayas, consider the following statements:

1. Great Himalayas or "Himadri" is the outer/southernmost range of the Himalayas.
2. The folds of Great Himalayas are symmetrical in nature.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

22. Consider the following statements with respect to Northern Plains:

1. The largest part of the Northern Plains is formed of new alluvium called Khadar.
2. Khadar is not suitable for intensive agriculture.
3. The river streams disappear in the Bhangar belt and re-emerge in the Terai region.

Which of the statements given above is/are **not** correct?

- (a) 2 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2, and 3

23. With reference to Western Ghats, consider the following statements:

1. The Western Ghats are comparatively higher in elevation and more continuous than the Eastern Ghats.
2. The highest peak of the Western Ghats is Kalsubai.
3. They stretch from River Tapi up to Kanyakumari.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2, and 3

24. Consider the following statements about the Northern Plains of India.

1. The alluvial plains can be divided into the Khadar and Bhangar categories.
2. Bhabar is a narrow belt ranging between 8 and 10 km parallel to the foothills of Shiwalik range.
3. The Terai belt is characterized by marshy and swampy landmass.

Which of the statements given above is/are correct?

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 3

(d) 1, 2, and 3

25. Consider the following statements about Aravalli range:

1. The Aravalli range is the oldest block mountains in India.
2. The highest peak is Guru Shikhar in Rajasthan.
3. The presence of Aravalli range determines the climatic conditions of eastern Rajasthan.
4. The Aravalli range is rising in height.

Which of the statements given above is/are correct?

- (a) 1 and 2
- (b) 2 only
- (c) 2, 3, and 4
- (d) 1, 2, and 3

26. Arrange the following mountain ranges of Peninsular India from north to south.

1. Maikala range
2. Balaghat range
3. Kaimur range
4. Ajanta range

Select the correct answer using the codes given below:

- (a) 3, 1, 4, 2
- (b) 1, 2, 3, 4
- (c) 3, 1, 2, 4
- (d) 1, 2, 4, 3

27. What is "Karewas"?

- (a) Glacial deposits in Eastern Himalayas
- (b) Glacial deposits in Kashmir Himalayas
- (c) Alluvial deposits of Western Himalayas
- (d) Denotes the general alluvial deposits

28. Arrange the following mountain ranges from north to south.

1. Karakoram ranges
2. Ladakh range
3. Zaskar range
4. Pir Panjal range

Select the correct answer using the codes given below:

- (a) 2, 1, 3, 4
- (b) 3, 2, 1, 4
- (c) 1, 2, 3, 4
- (d) 1, 3, 2, 4

29. Consider the following statements with regard to the Shiwalik range:



1. The range is wider in the western half of the Himalayas.
2. These are made up of unconsolidated river deposits and are prone to earthquakes and landslides.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

### Perfecting Past Prelims

1. In which state is the Guru Shikhar peak located? (2007)

- (a) Rajasthan
- (b) Gujarat
- (c) Madhya Pradesh
- (d) Maharashtra

2. Where are Shevaroy Hills located?(2007)

- (a) Andhra Pradesh
- (b) Karnataka
- (c) Kerala
- (d) Tamil Nadu

3. Which of the following hills are found where the Eastern Ghats and the Western Ghats meet? (2008)

- (a) Anaimalai Hills
- (b) Cardamom Hills
- (c) Nilgiri Hills
- (d) Shevaroy Hills

4. When you travel in the Himalayas, you will see the following: (2012)

1. Deep gorges
2. U-turn river courses
3. Parallel mountain ranges
4. Steep gradients causing landslides

Which of the above can be said to be the evidences for Himalayas being young fold mountains?

- (a) 1 and 2 only
- (b) 1, 2, and 4 only
- (c) 3 and 4 only
- (d) 1, 2, 3, and 4

5. Consider these pairs (2014)

1. Cardamom Hills Coromandel Coast
2. Kaimur Hills Konkan Coast
3. Mahadeo Hills Central India
4. Mikir Hills North East India

Which of the above pairs are correctly matched?

- (a) 1 and 2
- (b) 2 and 3
- (c) 3 and 4
- (d) 2 and 4

6. Consider the following pairs: (2015)

**Place of Pilgrimage      Location**

1. Srisailem      Nallamala Hills
2. Omkareshwar      Satmala Hills
3. Pushkar      Mahadeo Hills

Which of the above pairs is/are correctly matched?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2, and 3

7. Consider the following pairs: (2016)

**Famous Place      Region**

1. Bodhgaya      Baghelkhand
2. Khajuraho      Bundelkhand
3. Shirdi      Vidarbha
4. Nasik (Nashik)      Malwa
5. Tirupati      Rayalaseema

Which of the pairs given above are correctly matched?

- (a) 1, 2, and 4
- (b) 2, 3, 4, and 5
- (c) 2 and 5 only
- (d) 1, 3, 4, and 5

8. At one of the places in India, if you stand on the seashore and watch the sea, you will find that the sea water recedes from the shore line a few kilometers and comes back to the shore, twice a day, and you can actually walk on the sea floor when the water recedes. This unique phenomenon is seen at (2017)

- (a) Bhavnagar
- (b) Bheemunipatnam
- (c) Chandipur
- (d) Nagapattinam

9. Consider the following statements:(2017)

1. In India, the Himalayas are spread over five states only.
2. Western Ghats are spread over five states only.
3. Pulicat Lake is spread over two states only.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 3 only
- (c) 2 and 3 only
- (d) 1 and 3 only

10. Which one of the following is an artificial lake? (2018)

- (a) Kodaikanal (Tamil Nadu)
- (b) Kolleru (Andhra Pradesh)
- (c) Nainital (Uttarakhand)
- (d) Renuka (Himachal Pradesh)

11. With references to India, Didwana, Kuchaman, Sargol and khatu are the names of (2021)

- (a) Glaciers
- (b) Mangrove areas
- (c) Ramsar sites
- (d) Saline lakes

12. Consider the following pairs: (2022)

Peak	Mountains
1. Namcha Barwa	Garhwal Himalaya
2. Nanda Devi	Kumaon Himalaya
3. Nokrek	Sikkim Himalaya

Which of the pairs given above is/are correctly matched?

- (a) 1 and 2
- (b) 2 only
- (c) 1 and 3
- (d) 3 only

13. Which one of the following is the best example of repeated falls in sea level, giving rise to present-day extensive marshland? (2023)

- (a) Bhitarkanika Mangroves
- (b) Marakkanam Salt Pans
- (c) Naupada Swamp
- (d) Rann of Kutch

14. Consider the following statements: (2023)

1. Amarkantak Hills are at confluence of Vindhya and the Sahyadri Ranges.

2. Biligirirangan Hills constitute the easternmost part of Satpura Range.  
 3. Seshachalam Hills constitute the southernmost part of Western Ghats.  
 How many of the statements given above are correct?

- (a) Only one  
 (b) Only two  
 (c) All three  
 (d) None

## ANSWER KEYS

### Practice Questions

1. (c)	2. (c)	3. (a)	4. (d)	5. (d)
6. (c)	7. (b)	8. (d)	9. (d)	10. (b)
11. (d)	12. (a)	13. (c)	14. (c)	15. (d)
16. (c)	17. (a)	18. (c)	19. (a)	20. (d)
21. (d)	22. (d)	23. (b)	24. (d)	25. (b)
26. (a)	27. (b)	28. (c)	29. (c)	

### Perfecting Past Prelims

1. (a)	2. (d)	3. (c)	4. (d)	5. (c)
6. (a)	7. (c)	8. (c)	9. (b)	10. (a)
11. (d)	12. (b)	13. (d)	14. (d)	

## Solutions

### Practice Questions

3. (a) Statement 2 is incorrect. West coast is the coast of submergence (except Malabar Coast), while east coast is an emergent coast. The continental shelf of east coast extends till 500 km into sea.

These imply that sea is deeper in west coast than the sea on east coast. So west coast has favourable conditions for natural harbours.

4. (d) Andaman is an extension of the Arakan Yoma Range.

5. (d) Statement 1 is incorrect. Kayal is a part of a river where the water is stagnant. However, there may be opening into a Kayal for entry of ocean water.

Statement 2 is incorrect. Though Vembanad Kayal is the largest one, it is made up of both salt and fresh water. The lake is fed from both the sea and the fresh water rivers so that the water is salt free for some part.

6. (c) Statement 2 is incorrect. Lakshadweep is of coral origin.

Statement 4 is incorrect. The Aravalli Range is one of the oldest fold mountain ranges of the world.

7. (b) The major reef formations in India are restricted to the Gulf of Mannar, Gulf of Kutch, Andaman and Nicobar Islands, and the Lakshadweep Islands.

9. (d) The Aghil Pass is situated to the north in the Karakoram at an elevation of about 5000 m above the sea level. The pass joins Ladakh with the Xinjiang Province of China.

10. (b) The Meghalaya Plateau was once a part of the Deccan Plateau, and it is formed of hard ancient rocks. This plateau slopes down abruptly towards the south in the Sylhet plain of Bangladesh.

12. (a) The Western Ghats are relatively higher in the southern region.

15. (d) North-western India, particularly Rajasthan, is characterized by deserts, fertile plains, and moderately forested mountains (Aravalli Range).

16. (c) North-eastern Madhya Pradesh has tropical deciduous vegetation.

17. (a) Second and third pairs are incorrectly matched.

Javadi Hills—Tamil Nadu

Maikal Hills—Madhya Pradesh, Chhattisgarh

18. (c) Chilika is the largest brackish water lake of India.

19. (a) Mikir Hills are among those regions in India that receive more than 100 cm rainfall.

By the time monsoon reaches Jammu Hills and Zaskar Range, it does not have sufficient moisture to cause 100 cm or more rainfall.

21. (d) Statement 1 is incorrect. Great Himalayas or "Himadri" is the northern most range of the Himalayas, whereas the southernmost range of the Himalayas is the Shivalik Range.

Statement 2 is incorrect. The folds of Great Himalayas are asymmetrical in nature. Himalayas were formed mainly by the movement of Indian plate towards the Eurasian plate. This movement of Indian plate continues, which has given rise to middle Himalayas or lower Himalayas with a large number of asymmetrical folds leading to the formation of valleys.

22. (d) Statement 1 is incorrect. The largest part of the Northern Plains is formed of old alluvium called Bhangar.

Statement 2 is incorrect. Khadar is very fertile soil and thus is suitable for intensive agriculture.

Statement 3 is incorrect. The river streams disappear in the Bhabar belt and re-emerge in the Terai region.

23. (b) Statement 2 is incorrect. The highest peak of the Western Ghats is Anaimudi.

25. (b) Statement 1 is incorrect. The Aravalli Range is one of the oldest fold mountains in the world.

Statement 3 is incorrect. The presence of Aravalli Range determines the climatic conditions of Western Rajasthan.

Statement 4 is incorrect. As Aravalli Range is one of the oldest fold mountains, they are not rising in height.

### **Perfecting Past Prelims**

4. (d) Statement 1 is correct. In the case of young fold mountains, gorges are deep. In the case of old mountain ranges, deep gorges vanish away.

Statement 2 is correct. U-turn river courses arise in young landmass. Old landmasses are almost flat in shape.

Statement 3 is correct. On account of erosion activity, old landmasses combine to form a single landmass.

Statement 4 is correct. Steep gradients gradually change to gentle slopes with passage of time.

5. (c) Statement 1 is incorrect. The Cardamom Hills are located in the interior of landmass covering parts of Tamil Nadu and Kerala.

Statement 2 is incorrect. Kaimur Hills are located in Madhya Pradesh.

6. (a) Third pair is incorrectly matched. Pushkar is in Rajasthan, and Mahadeo Hills are part of Satpura Range. By eliminating just one option, we can conclude that option (a) is the right answer.

7. (c) First pair is incorrectly matched. Bodhgaya is in Gaya district of Bihar. Fourth pair is incorrectly matched. Nashik is in Maharashtra and Malwa region is in Madhya Pradesh. By eliminating just two options, we can conclude that option (c) is the right answer.

8. (c) Chandipur beach in Balasore district of Odisha is unique—the sea recedes massively (approximately 5 km) during low tides and comes back with equal vengeance during high tides. It is one of those rare beaches in the world, where the sea disappears suddenly.

9. (b) Statement 1 is incorrect. Himalayas are spread over seven states, namely, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Assam and West Bengal.

Statement 2 is incorrect. Western Ghats pass through six states, namely, Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra, and Gujarat.

10. (a) Kodaikanal (Tamil Nadu) is an artificial lake. Remaining three are natural lakes.

11. (d) Didwana, Kuchaman, Sargol and Khatu are the saline lakes of Rajasthan.

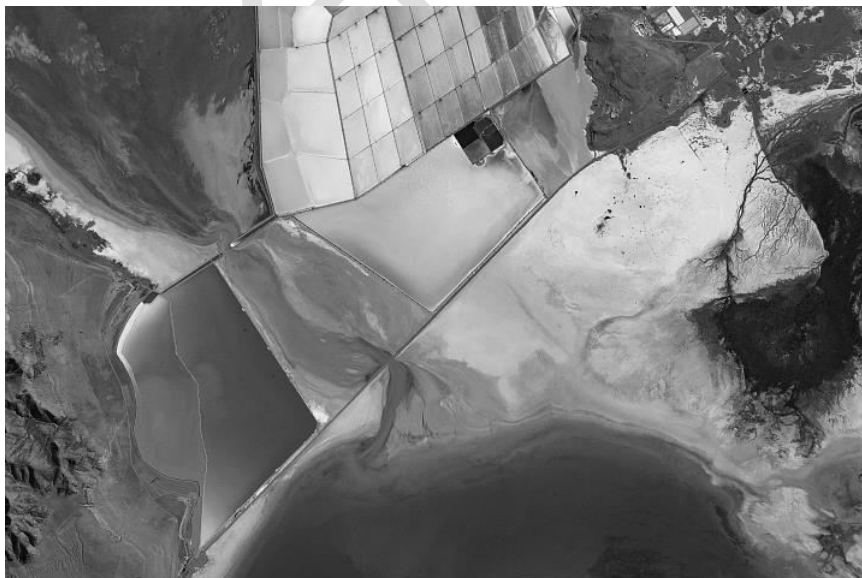
12. (b) Pair 1 is incorrectly matched. Namcha Barwa is not situated in Garhwal Himalaya. Namcha Barwa is considered as the Eastern point of the Himalayas. It is located on the extreme east of the Indian state of Arunachal Pradesh. Brahmaputra River takes a U turn on reaching Namcha Barwa.

Pair 2 is correctly matched. The part of the Himalayas lying between Satluj and Kali rivers is known as Kumaon Himalayas. Nanda Devi is part of the Kumaon Himalayas.

Pair 3 is incorrectly matched. Nokrek is not situated in Sikkim Himalaya. Nokrek is the highest peak in West Garo Hills of Meghalaya.

13. (d) The Rann of Kutch is a long, narrow salt flat that stretches inland in an almost straight line for 325 kilometers (200 miles) from the Arabian Sea coast. Rann comes from a Hindi word meaning desert, and the region is famous for its marshy salt flats which become snow white when the summer monsoon flood waters dry up. These inhospitable lowlands are resource-rich with minerals and natural gas deposits.

Angular evaporation ponds along the floor of the Rann are the heart of a major salt-producing industry. The straight lines across the image are ditches that help control the flow of salt-rich water.



Thousands of years ago, the Rann was a shallow arm of the Arabian Sea. Land uplift caused by tectonic forces then closed off the connection with the sea, creating a vast lake that was still navigable during the time of Alexander the Great.

14. (d) Statement 1 is incorrect.

Statement 2 is incorrect: Biligirirangan Hills is situated in south-eastern Karnataka while the Satpura Range rises in eastern Gujarat running east through the border of Maharashtra and Madhya Pradesh and ends in Chhattisgarh.

Statement 3 is incorrect: Seshachalam Hills are part of the Eastern Ghats in southern Andhra Pradesh.

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