



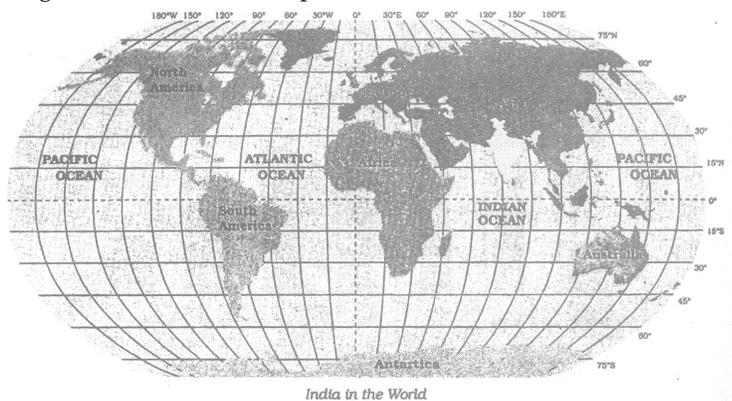
INDIA: SIZE AND LOCATION



SL - 01 (G)

LOCATION

India is a vast country. LYING ENTIRELY IN THE Northern hemisphere the main land extends between latitudes $8^{\circ}4'$ N and $37^{\circ}6'$ and longitudes $68^{\circ}7'$ E $97^{\circ}25'$ E. the Tropic of Cancer ($23^{\circ}30'N$) divides the country into almost two equal parts. To the southeast and southwest of the mainland, lie the Andaman and Nicobar islands in Bay of Bengal and the Lakshadweep islands in the Arabian Sea.



SIZE

the land mass of India has an area of 3.28 million square km. India's total areas accounts for about 2.4 per cent of the total geographical area of the world. India is the seventh largest country of the world. India has a land boundary of about 15200 km and the total length of the coast line of the mainland including Andaman and Nicobar and Lakshadweep is 7516.6 km.

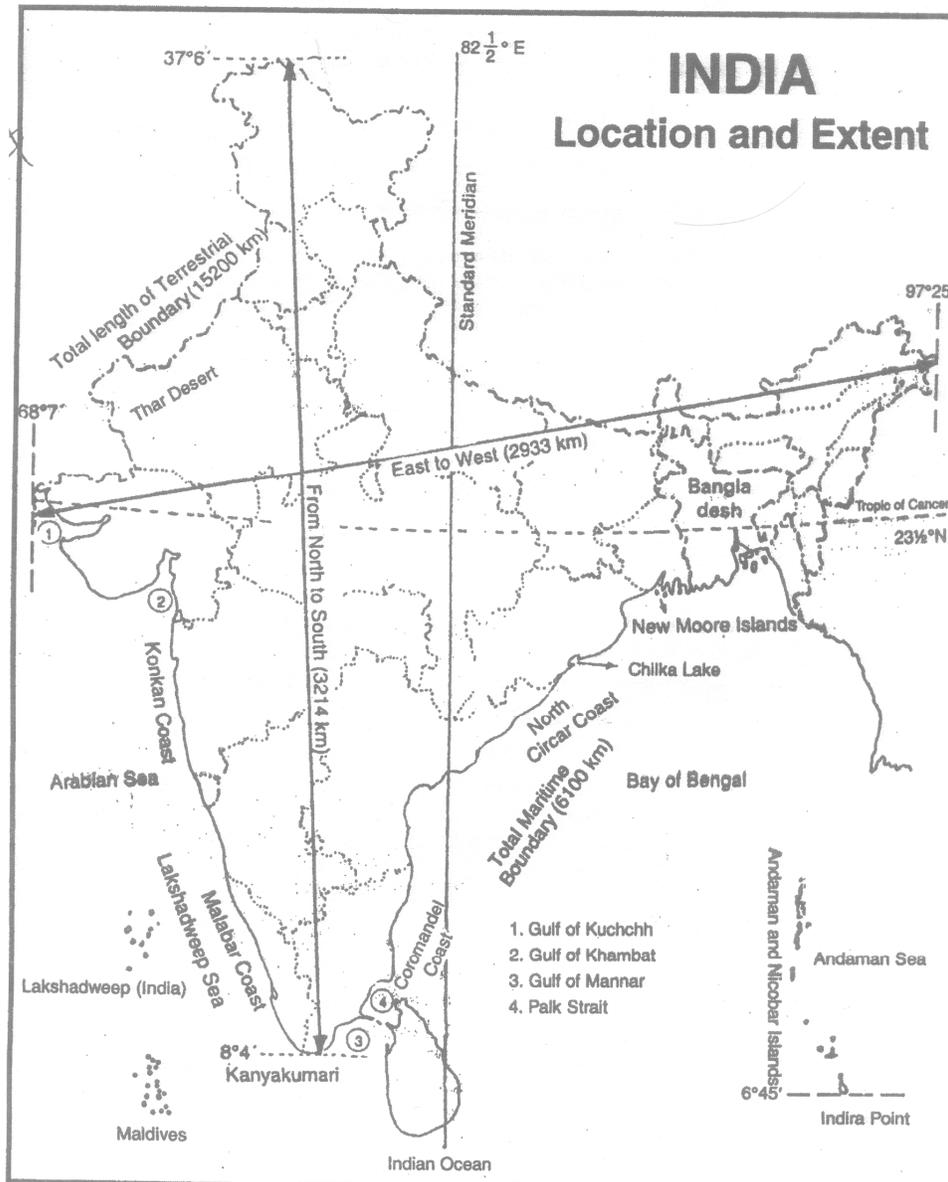
(a) India has a distinct physical and cultural identity:

Notwithstanding wide diversity, the Indian society has fostered unity and homogeneity. To a large extent this unity and homogeneity has been promoted by the geographical features of the country.

- (i) On its north, India is bounded by lofty mountains. These mountains run east-west for thousands of kilometers. These provide a natural wall against all possible intrusions.
- (ii) On the south, India is surrounded by the seas and the ocean from three sides. It means, the land is protected from outside intrusions.

Theses geographical features have ensured that:

- (i) people from outside could come only through well-defined routes, whether by sea or through passes in mountains.
- (ii) People who came from outside brought with them their cultural elements. these elements came to be assimilated in Indian culture.
- (iii) Indian society adapted itself to the new norms.
- (iv) Thus, by adopting new norms and values and accepting them as their own, unity and homogeneity came to 'be promoted.



Location and Extent of India.

(b) "The north-south extent of India is larger than its east-west extent even though the country's latitudinal and longitudinal extent in degrees is of the same value."

The north-south distance between two successive latitudes remains the same or constant, and it is 3214 km in this case. But the east-west distance between the two successive longitudes goes on progressively decreasing from the equator to the poles. This is because all the meridians merge into a single point at the poles. In India the maximum east-west extent therefore is much less than km. it is 2933 km only.

(c) Impact of the longitudinal extent of India:

The earth takes 24 hours to complete one rotation (360°) about its axis. It means the earth rotates at the pace of 15 per hour (360° / 24). As the longitudinal extent of India is about 30° longitude the time lag between easternmost and westernmost points of India is of two hours. When it is 6.00 a.m. at eastern

extremity of India it is still 4.00 a.m. at the westernmost point of India. To avoid this time confusion, time along the Standard Meridian of India (82° 30'E) passing through Mizapur (in Uttar Pradesh) is taken as the standard time for the whole country. the latitude with an odd value of 82° 30'E has been selected as the Standard Meridian of India as –

- (i) It is well divisible by 7 o 30', a standard adopted by almost all the countries of the world.
- (ii) It lies almost in the middle of India, and as such, it suits us the most.

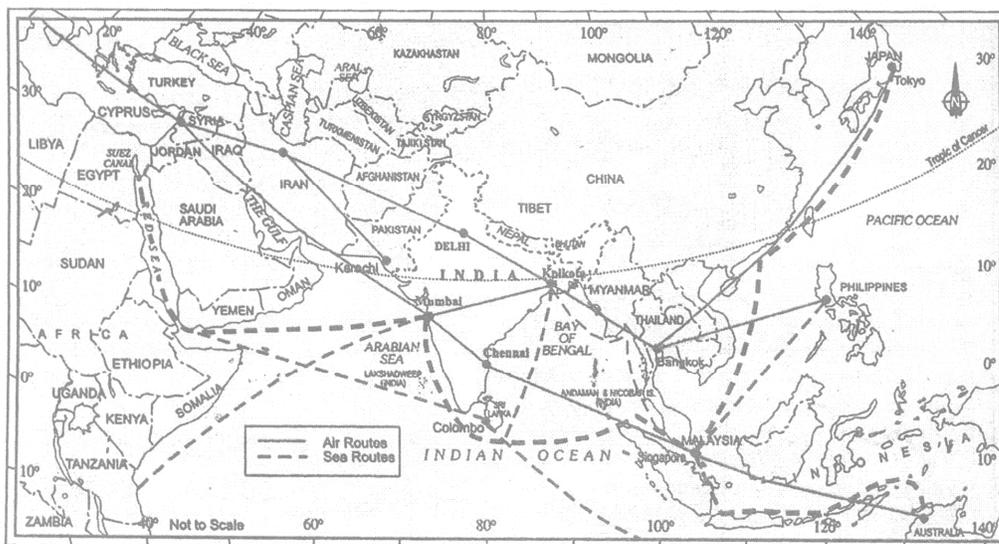
(d) Impact of the Latitudinal extent of India:

Kanyakumari is situated near Equator. here days and nights are almost equal, the maximum difference is 45 minutes only. but as we move farther towards north or south of the Equator, the difference between the length of the day and night becomes progressively larger. in north Kashmir it is as much as 5 hours, as it is far away from the equator.

INDIA AND THE WORLD

(a) Significance of India's Location:

- (i) Very thickly populated parts of the world such as China, Japan and Southeast Asia lie very close to India. This has helped in developing trade and other relations with them.
- (ii) The oil rich countries of the Persian Gulf not far from us. we receive bulk of our supplies from them.
- (iii) Being at the head of the Indian Ocean, the country occupies a strategic position and commercially favorable location in respect of Africa, Asia Australia.
- (iv) The Suez sea-route provides us the shortest route to industrial Europe and America.
- (v) The busy air-routes pass through India, connecting east, South East Asia and Australia on the one hand and Europe and America on the other.
- (vi) The third largest ocean in the world came to be known as the Indian Ocean because the subcontinent of India stands at the head of this ocean. India was the favorite destination of the traders of the world.



India on International Highway of Trade and Commerce

(b) India's Contacts with the outside World in Ancient and Medieval Times:

India belongs to the Eastern Hemisphere, which contains the oriental world. In ancient times, the sea played an important role in determining the nature of interaction. The central location of India at the head of the Indian Ocean was of great advantage. Countries of East Africa, West Asia, South and South-East

Asia, and East Asia could be reached through sea routes. Hence, India established close cultural and commercial contacts with these countries.

India's contacts with the outside world have continued through the ages:

- (i) The exchanges of ideas and commodities dates back to the ancient times.
- (ii) The ideas of the Upanishads, and the Ramayana, the stories of Panchatantras, the Indian numerals and the decimal system could reach many parts of the world.
- (iii) The spices, muslin and other Indian goods were taken to different countries.]
- (iv) The influence of Greek sculpture, and the architectural styles of dome and minarets from West Asia can be seen in India.

INDIA'S NEIGHBOURS

To the north of India are China, Nepal and Bhutan, and to the east, Bangladesh and Myanmar, to the west and northwest are Pakistan and Afghanistan. In the south, separated from India by the Palk Strait, lies the island country of Sri Lanka. To the south of Lakshadweep lies Maldives, Not far the Andaman and Nicobar islands lie our closest South-East Asian neighbours: Indonesia, Malaysia and Thailand.



India and Adjacent Countries

(a) The Indian Subcontinent:

India is called a subcontinent because of its vastness and distinct physical and cultural identity. The countries that form the Indian subcontinent are Pakistan in the northwest, India at the core, Nepal in the north, Bhutan in the northeast and Bangladesh in the east.

SOME INTERESTING KNOWLEDGE

(i) The southernmost point of the Indian Union - 'Indira Point' got submerged under the sea water in 2004 during the Tsunami.

(ii) Since the opening of the Suez Canal in 1869, India's distance from Europe has been reduced by 7000 km.

(iii) Before 1947, there were two types of states in India - the provinces and the princely states. Provinces were ruled directly by British officials who were appointed by the Viceroy. Princely states were ruled by local, hereditary rulers, who acknowledged sovereignty in return for local autonomy.

EXERCISE

OBJECTIVE DPP- 1 .1

- The tropic of Cancer does not pass through -
(A) Rajasthan (B) Orissa (C) Chhattisgarh (D) Tripura
- The easternmost longitude of India is -
(A) 97°25'E (B) 68°7'E (C) 77°6'E (D) 82°32'E
- What per cent of the world's land area is with India?
(A) 0.42% (B) 1.42% (C) 2.42% (D) 3.42%
- What is the length of the land boundary of India?
(A) 5200km (B) 15200km (C) 45200 km (D) 52000km
- Name the parallel of latitude which divides India into almost two equal parts.
(A) Tropic of Cancer (B) Tropic of Capricorn (C) Equator (D) Arctic Circle
- Uttaranchal, Uttar Pradesh, Bihar, West Bengal and Sikkim have common frontiers with -
(A) China (B) Bhutan (C) Nepal (D) Myanmar
- If you intend to visit Kavarati during your summer vacations, which one of the following Union Territories of India you will be going to
(A) Pondicherry (B) Lakshadweep
(C) Andaman and Nicobar (D) Diu and Daman
- My friend hails from a country which does not share land boundary with India. Identify the country.
(A) Bhutan (B) Tajakistan (C) Bangladesh (D) Nepal
- Name the group of islands lying in the Arabian Sea.
(A) Andaman and Nicobar (B) Lakshadweep
(C) New Moore (D) None of these
- Which of the following country is not larger than India?
(A) Russia (B) USA (C) China (D) France
- Which island group of India lies to its southeast?
(A) Andaman And Nicobar (B) Lakshadweep
(C) Both of these (D) None of these
- Which Longitude represents the Standard Meridian of India?
(A) 97°25'E (B) 8° 7'E (C) 82°30'E (D) None of these

SUBJECTIVE DPP - 1.2

Very Short Answer Type Questions:

1. Which is the southernmost tip of Indian Union?
2. What are the degrees of latitude of the northern extremity of India?
3. Which island group of India lies to its southwest?
4. What is the north-south and east-west distance of India?
5. What is the total length of the coast line of the mainland of India including its islands?
6. Name the two routes by which India is connected with Europe, North America and South America.

Short Answer Type Questions:

7. What is the longitudinal and latitudinal extension of India? What is its importance?
8. Latitudinal and longitudinal extent of India is about 30°. Then why is North-south extent bigger than East-west extent ?
9. Why we have selected a standard meridian with an odd value of 82° 30' E?
10. The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat in the west but the watches show the same time. How does this happen?
11. Why the difference between the duration of day and night hardly felt at Kanyakumari but not so in Kashmir ?
12. What is the total land of India? Which countries of the world are bigger than India ?

Long Answer Type Questions:

13. What is the significance of India's location?
14. Describe how geographical features of India have fostered unity and homogeneity in the Indian society.
15. Give a brief account of India's contacts with the outside world in ancient and medieval times.

ANSWER KEY

(Objective DPP 1.1)

Que.	1	2	3	4	5	6	7	8	9	10	11	12
Ans	B	A	C	B	A	C	B	B	B	D	A	A



PHYSICAL FEATURES OF INDIA

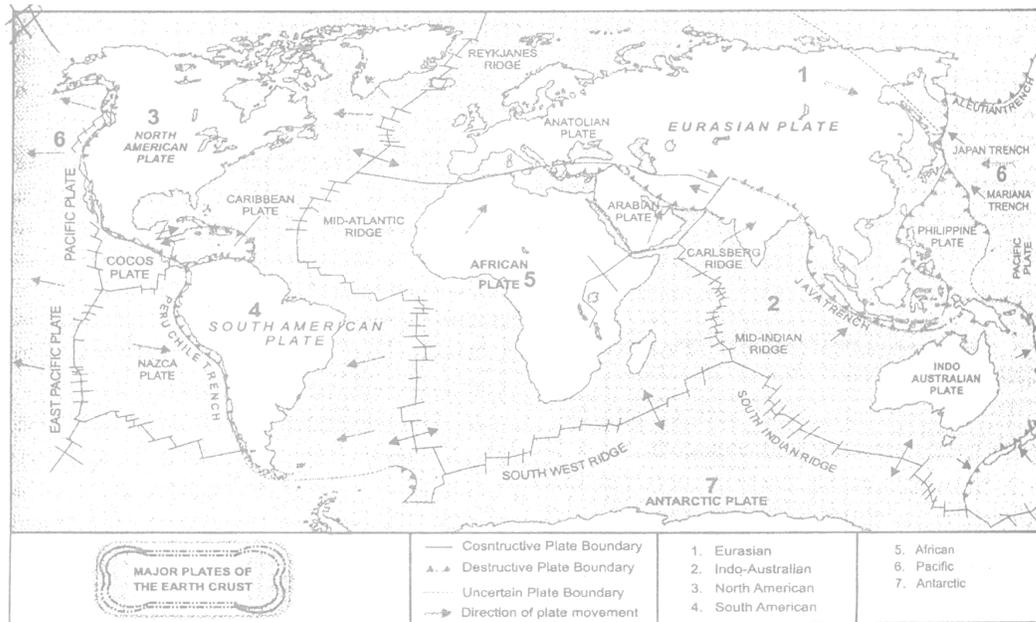


SL -02 (G)

THEORY OF PLATE TECTONIC

Our Country has practically all major physical features of the earth i.e. mountains, plains, deserts, plateaus and islands. India is a large landmass formed during different geological periods which has influenced her roller. Besides geological formations, a number of processes such as weathering, erosion and deposition have created and modified the relief to its present form.

earth scientists have attempted to explain the formation of physical features with the help of "Theory of Plate Tectonics". According to this theory, the crust (upper part) of the earth has been formed out of seven major and some minor plates.



The movement of the plates results in the building of stresses within the plates and the continental rocks above, leading to folding, fracturing and volcanic activity. broadly, these plate movements are classified into three types.

- (i) While some plates come towards each other form convergent boundary. in the event of two plates coming together they may either collide and crumble, or one may slide under the other.
- (ii) Some plates move away from each other and form divergent boundary.
- (iii) At times, they may also move horizontally past each other and form transform boundary.

The movement of these plates has changed the position and size of the continents over millions of years. such movements have also influenced the evolution of the present landform features relief of India.

(a) Formation of Himalayas:

The convectional currents split the crust into a number of pieces, thus leading to the drifting of the Indo-Australian after being separated from the Gondwana land, towards north. The northward drift resulted in the collision of the plate with much larger Eurasian plate. Due to this collision, the sedimentary rocks which were accumulated in the geosynclines known as the Tethys were folded to form the mountain system of Western Asia and Himalaya.

(b) Formation of Northern plains:

The Himalayan uplift out of the Tethys Sea and subsidence of the northern flank of the peninsular plateau resulted in the formation of a large basin. In due course of time this depression, gradually got filled with deposition of sediments by the rivers flowing from the mountains in the north and the peninsular plateau in the south. A flat land of extensive alluvial deposits led to the formation of the northern plains of India.

(c) "The land of India displays great physical variation." :

(i) Geologically, the Peninsular Plateau constitutes one of the ancient landmasses on the earth's surface. It was supposed to be one of the most stable land blocks. The peninsular plateau is composed of igneous and metamorphic rocks with gently rising hills and wide valleys.

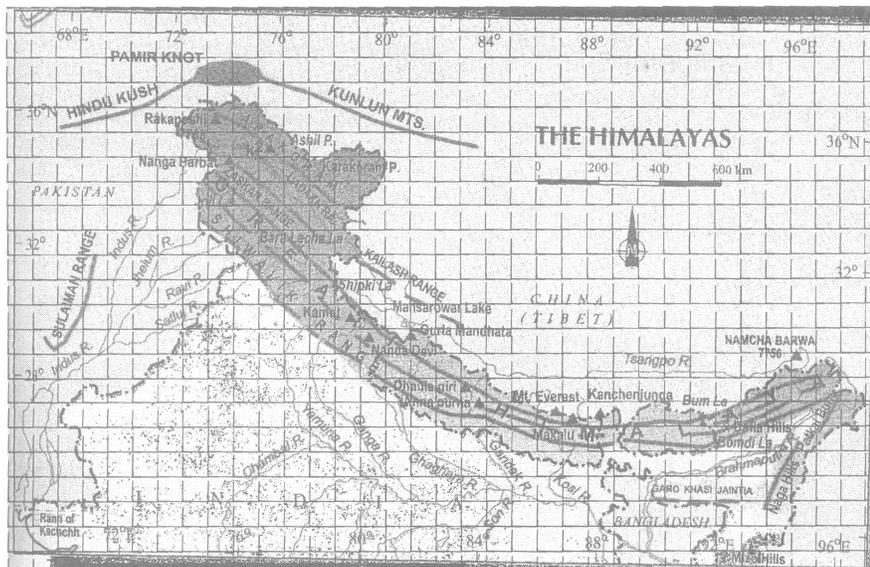
(ii) The Himalayas and the Northern Plains are the most recent landforms. From the view point of geology, Himalayan Mountains form an unstable zone. The whole mountain system of Himalayas represents a very youthful topography with peaks, deep valleys and fast flowing rivers.

(iii) The northern plains are formed of alluvial deposits.

MAJOR PHYSIOGRAPHIC DIVISION

(a) The Himalayan Mountains:

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. They form an arc, which covers a distance of about 2,400km. Their width varies from 400km in Kashmir to 150 km in Arunachal Pradesh. The altitudinal variations are greater in the eastern half than those in the western half.



The Latitudinal parallel ranges of Himalayas:

(i) 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 meters. It contains all the prominent Himalayas peaks. The core of this part of Himalayas is composed of granite. It is perennially snow bound, and a number of glaciers descend from this range.

(ii) The range lying to the south of the Himadri forms the most rugged mountain system and is known as Himachal or lesser Himalaya. The ranges are mainly composed of highly compressed and altered rocks. The altitude varies between 3700 and 4500 meters and the average width is 50 km. The prominent ranges over here are Pir Panjal, Dhauladhar and Mahabharata ranges. This range consists of the famous valley of Kashmir, the Kangra and Kullu Valley in Himachal Pradesh. This region is well known for its hill stations.

(iii) The outer most range of the Himalayas is called the Shiwaliks. They extend over a width of 10-50 km and have an altitude varying between 900 and 1100 meters. These ranges are composed of unconsolidated sediments brought down by rivers from the main Himalayan ranges located farther north. These valleys are covered with thick gravel and alluvium.

The longitudinal valley lying between lesser Himalaya and the Shiwaliks are known as Duns. Dehra Dun, Kotli Dun and Patli Dun are some of the well-known Duns.

Division of Himalayas on the basis of regions from west to east:

These divisions have been demarcated by river valleys.

- (i) The part of Himalayas lying between Indus and Satluj has been traditionally known as Punjab Himalaya, also known regionally as Kashmir and Himachal Himalaya from west to east respectively.
- (ii) The part of the Himalayas lying between Satluj and Kali rivers is known as Kumaon Himalayas.
- (iii) The Kali and Tista rivers demarcate the Nepal Himalayas.
- (iv) The part lying between Tista and Dihang rivers is known as Assam Himalayas.

Purvanchal or the Eastern hills and mountains:

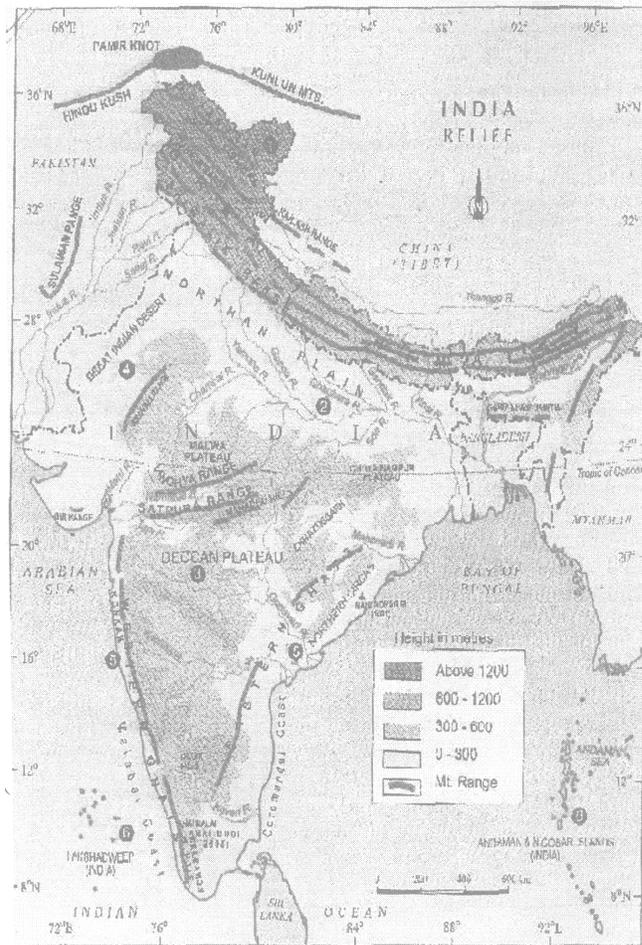
Beyond the Dihang gorge, the Himalayas bend sharply to the south and spread along the eastern boundary of India. They are known as the Purvanchal or the Eastern hills and mountains. These hills running through the northeastern states are mostly composed of strong sandstones which are sedimentary rocks. Covered with dense forests, they mostly run as parallel ranges and valleys. The Purvanchal comprises the Patkai hills, the Naga hills, Manipur hills and the Mizo hills.

(b) The Northern Plains:

The Northern plain has been formed by the interplay of the three major river systems, namely - the Indus, the Ganga and the Brahmaputra along with their tributaries. This plain is formed of alluvial soil. It spreads over an area of 7 lakh sq. km. The plain being about 2400 km long and 240 to 320 km broad, is a densely populated physiographic division. With a rich soil cover combined with adequate water supply and favorable climate it is agriculturally a very productive part of India. The rivers coming from northern mountains are involved in depositional work. In the lower course, due to gentle slope, the velocity of the river decreases which results in the formation of riverine islands. The rivers in their lower course split into numerous channels due to the deposition of silt. These channels are known as distributaries.

Divisions of Northern Plains:

- (i) Punjab Plains: The western part of the Northern Plain, is formed by the Indus and her tributaries, 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.
- (ii) Ganga Plain: Extends between Ghaggar and Tista rivers. It is spread over the states of north India, Haryana, Delhi, U.P., Bihar, Jharkhand and West Bengal.
- (iii) Brahmaputra Plain: Lies in the east of Ganga plain, particularly in Assam.



Divisions of Northern Plains on the basis of relief features :

- (i) 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.
- (ii) South of bhabar belt, the streams and rivers reemerge and create a wet, swampy and marshy region known as terai. This was a thickly forested land full of wildlife. The forests have been cleared to create agricultural land and to settle migrants from Pakistan after partition.
- (iii) The largest part of the northern plain is formed of older alluvium. They lie above the flood plains of the rivers and present a terrace like feature. This part is known as bhangar. The soil in this region contains calcareous deposits locally known as kankar.
- (iv) The newer, younger deposits of the flood plains are called khaddar, They are renewed almost every year and so are fertile, thus, ideal for intensive agriculture.

	Bhangar	Khaddar
1	Old alluviam	New alluviam
2	Is always above the level of the flood pains	Is finer, more sandy & free from kanker modules
3	Flood plains	more fertile
4	Found away from the river-bed	found near river channels in deltas & floud
5	clayey & dark	sandy & light in colour

(C) The peninsular plateau :

The Peninsular Plateau is a tableland composed of the old crystalline, igneous and metamorphic rocks. It was formed due to the breaking and drifting of the Gondwana land and thus, making it a part of the oldest landmass. The plateau has broad and shallow valleys and rounded hills. One of the distinct features of the peninsular plateau is the black soil area known as Deccan Trap. This is of volcanic origin hence the rocks are igneous. Actually these rocks have denuded over time and are responsible for the formation of black soil. The Aravali Hills lie on the western and northwestern margins of the peninsular plateau. These are highly eroded hills and are found as broken hills. They extend from Gujarat to Delhi in a southwest-northwest direction .

The Central Highlands:

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 Vindhayan range is bonded by the Central Highlands on the south and the Aravallis on the northwest. The further westward extension gradually merges with the sandy and rocky desert of Rajasthan. The flow of the river draining this region, namely the Chambal, the Sind , the Betwa and Ken is from southwest to northeast, thus indicating the slope. The Center Highlands are wider in the west but narrower in the east. The eastward extensions of this plateau are locally known as the Bundelkhand and Beghelkhand . The Chotanagpur plateau marks the further eastward extension drained by the Damodar river .

The Deccan Plateau :

The Deccan Plateau is a triangular landmass that lies to the south of the river Narmada . The Satpura range flanks its broad base in the north while the Mahadev , the Kaimur hills and the Maikal range form its eastern extension. The Deccan Plateau is higher in the west and slopes gently eastwards.

The Northwestern Plateau :

The Northeast plateau is an extension of the Deccan Plateau in the northeast -locally known as the Meghalaya and Kabi-Anglong Plateau. It is separated by a fault from the Chotanagpur Plateau. Three Prominent hill ranges from the west to east are the Garo, he Khasi and the Jaintia Hills.

	Western Ghats	Eastern Ghats
1	Runs parallel to western coast & forms the western of deccan plateau	Runs parallel to the eastern coast , stretch from the Mahanadi Valley to the Nilgiris in the south
2	Are higher , average height 900-1600 metres	Lower than western ghats, average height 600 metres.
3	Are like a continuous wall can be crossed through passes only (Thal ghat, Borg hat and Pal ghat)	Are discontinuous & irregular, have been dissected by rivers draining into the Bay of Bengal.
4	Is the source of many large rivers for e.g. Godavri, Krishna and Kaveri	No big river originates from here.
5	Causes orographic rain by facing the rain bearing moist winds to rise along the western slopes of the Ghats	Receives rainfall only in winter season though the North-eastern monsoon.
6	The height of the Western Ghats progressively increases from north to south. Highest peaks include the Anai Mudi (2695 mt.) and the Doda Betta (2637 mt.)	Mahendragiri (1501 mt.) is the highest peak in the Eastern Ghats . Shevaroy Hills and the Javadi Hills are located to the southeast of the Eastern Ghats.

(d)the Indian Desert :

To the northwest of the Aravalli 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. Though the underlying rock structure of the desert is an extension of the peninsular plateau, yet due to extreme arid conditions, its surface features have been carved by physical weathering and wind actions. Some of the well renowned desert land features present have are mushroom rocks, shifting dunes and oasis mostly in its southern part). On the basis of the orientation , the desert

can be divided into two parts : the northern part is sloping towards Sindh and the southern towards the Rann of Kachchh. Most of the rivers in this region are non-perennial . The Luni River flowing in the southern part of desert, the only large river in this region, is of some significance. Barchans (crescent shaped dunes) cover larger areas but longitudinal dunes become more prominent near the Indo-Pakistan boundary .

(e) The Coastal Plains :

India has a long coastline. On the basis of the location and active geomorphologic processes, it can be broadly divided into two : (i) the western coastal plains ; (ii) the eastern coastal plains.

The western coastal plains are an example of submerged coastal plain. Kandla, Mazagoan, Jawahar Lal Nehru port at Navha Sheva, Marmagao, Mangalore, Cochin, etc, are some of the important natural ports located along the west coast, Extending from the Gujarat coast in the north to the Kerala coast in the south , the western coast may be divided into following divisions-the Kachchh and Kathiwar coast in Gujarat, Konkan coast in Maharashtra, Goan coast and Malabar coast in Karnataka and Kerala respectively . The western coastal plains are narrow in the middle and get broader towards north and south. The rivers flowing through this coastal plain do not form any delta. The Malabar coast has got certain distinguishing features in the form of 'Kayals' (backwaters) , which are used for fishing , inland navigation and also due to its special attraction for tourists. Every year the famous Nehru Trophy Vallamkali (boat race) is held in Punnamada Kayal in Kerala.

As compared to the western coastal plain, the eastern coastal plain is broader and is an example of an emergent coast. These include the deltas of the Mahanadi, the Godavari, the Krishna and the Kaveri. 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.

(f) The Islands :

There are two major island groups in India-one in Bay of Bengal and the other in the Arabian Sea. The Bay of Bengal island groups consist of about 200 islands. These are situated roughly between 6° N-14° N and 92° E-94° E. The entire group of island is divided into two broad categories-the Andaman in the north and the Nicobar in the south. They are separated by a water body which is called the Ten degree channel . It is believed that these islands are an elevated portion of submarine mountains. However , some smaller islands are volcanic in origin. Barren Island , the only active volcano in India is also situated in the Nicobar Islands.

The islands of the Arabian Sea include Lakshadweep and Minicoy. These are scattered between 8° N -12° N and 71° E- 74° E longitude. 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. The entire group of islands is broadly by the Eleventh degree channel , north of which is the Amini Island. Kavaratti island is the administrative headquarters of Lakshadweep.

Physical divisions of India -Each region complements each other

- (i) The northern mountains are the major sources of water and forest wealth.
- (ii) The northern plains are the granaries of the country. They provide the base for early civilizations.
- (iii) The plateau is a storehouse of minerals, which has played a crucial role in the industrialization of the country.

SOME INTERESTING KNOWLEDGE

- (i) Most volcanoes and earthquakes in the world are located at plate margins, but some do occur within the plates.
- (ii) Gondwanaland is the southern part ancient super continent Pangea with Angara Land in the northern part.
- (iii) Majuli, in the Brahmaputra river is the largest riverine island in world.
- (iv) 'Doab' is made up of two words-'do' meaning two 'ab' meaning water. Similarly 'Punjab' is also made up of two words. 'Punj' meaning five and 'ab' meaning water.
- (v) The Chilka Lake is the largest salt water lake in India. It lies in the state of Orissa , to the south of Mahanadi delta.
- (vi) India's only active volcano is found on Barren Island in Andaman and Nicobar group of Islands.

EXERCISE

OBJECTIVE DPP - 201

1. A landmass bounded by sea on three sides is referred to as -
(A) Coast (B) Island (C) Peninsula (D) None of the above
2. Mountain ranges in the eastern part of India forming its boundary with Myanmar are collectively called as -
(A) Himachal (B) Uttaranchal (C) Purvanchal (D) None of the above
3. The western coastal strip, south of Goa is referred to as -
(A) Coromandal (B) Konkan (C) Kannad (D) Northern Circar
4. The southern most tip of India Union is -
(A) Indira Point (B) Tuticorin (C) Trivandrum (D) Kanya kumari
5. Name the types of plate movements.
(A) Convergent (B) Divergent (C) Transform (D) All of the above
6. Name the oldest landmass of the Indian subcontinent.
(A) The Himalayas (B) Northern Plains (C) Peninsular Plateau (D) Island groups
7. The average height of the Hamadri is -]
(A) 5000 meters (B) 6000 meters (C) 7000meters (D) 5500 meters
8. The average width of the Himachal or lesser Himalaya is -
(A) 5 km (B) 50 km (C) 500 km (D) 5500 meters
9. The Nepal Himalayas lies between -
(A) Indus and Satluj (B) Satluj and Kali (C) Kali and Tista (D) Tista and Dihang
10. The total length of the Northern Plains is -
(A) 2400 km (B) 3400 km (C) 4200 km (D) 5000 km
11. Part of the Northern Plains, which was a thickly forested region full of wildlife, where the forests have been cleared to create agricultural land and to settle migrants from Pakistan after partition.
(A) Bhabar (B) Terai (C) Bhangar (D) Coastal Plains
12. A table land composed of crystalline, igneous and metamorphic rocks.
(A) Himalayas (B) Northern Plains (C) Peninsular Plateau (D) Coastal Plains
13. The part of the Peninsular Plateau lying to the north of the Narmada River covering a major rea of the Malwa plateau is known as -
(A) Eastern Ghats (B) Western Ghats (C) Aravalis (D) Central Highlands
14. The area where the Himalayas stand today was occupied by and ancient sea called the :
(A) Panthalasa ocean (B) Red sea (C) Tethys (D) Dead Sea
15. Name the island group of India that is of coral origin :
(A) Lakshadweep (B) Rameshwaram (C) Male (D) Andman and Nicobar

SUBJECTIVE DPP -2.2

very short answer type question :

1. What are tectonic plates ?
2. Which continents of today were part of the Gondwanaland ?

3. Which is the highest range of the Himalayas ? Mention its one feature .
4. What is the width of the northern plains ?
5. How is the northern plain divided on the basis of the differences in the relief ?
6. What is barchan ?
7. What is the northern and southern extension of western coast called ?
8. Name the island group of India having coral origin .
9. Name the five rivers that makes Punjab.
10. Which is the highest peak of the Deccan plateau ?

Short answer type questions :

11. Which two forces are responsible for shaping present landform features of India ?
12. Write three facts which prove the physiographic divisions are complementary to each other.
13. How are the Himadri Himalayas different from the Himachal Himalayas ?
14. What are Shiwaliks ? Write two characteristics of it .
15. Explain for main characteristics of the northern plains of India .
16. Explain how the Himalayas act as a boon for India four different ways.
17. Distinguish between
 - (i) Converging and diverging tectonic pates.
 - (ii) Bhangar and Khadar
 - (iii) Western Ghats and Eastern Ghats
18. Write short notes on the following .
 - (i) The Indian Desert
 - (ii) The Central Highlands
 - (iii) The Island groups of India

Long answer type questions :

19. "Our country has practically all major physical features of the earth" . Explain.
20. Describe the formation of Himalayas and the Northern Plains.
21. Describe the division of Himalayas on the basis of regions from west to east .
22. In how many sections the Northern Plains can be divided ? Explain each of them .
23. Differentiate between the two islands groups of India .

ANSWER KEY

(Objective dpp 2.1)

Que.	1	2	3	4	5	6	7	8	9		11	12	13	14	15
Ans.	C	C	C	A	D	C	B	B	C	A	B	C	D	C	A



DRAINAGE



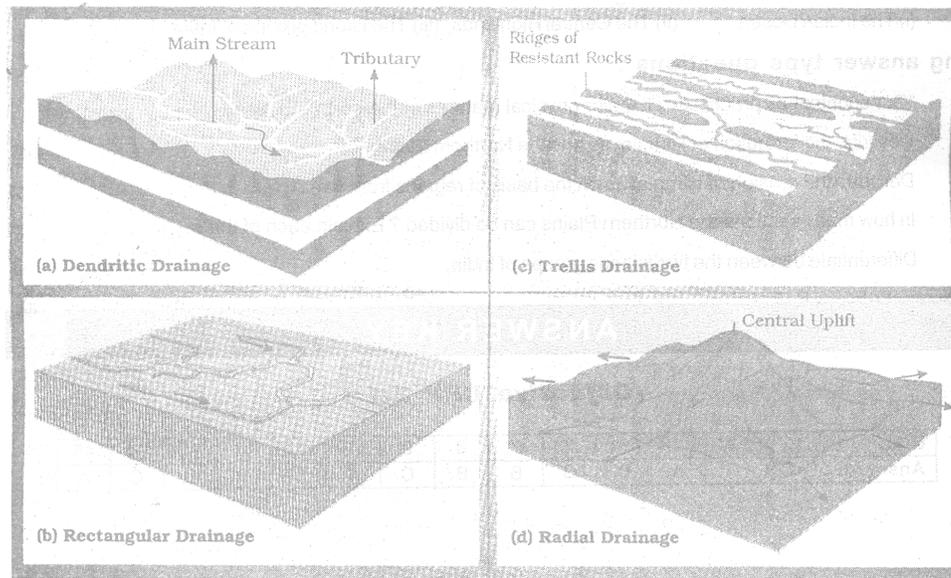
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DRAINAGE PATTERS

The term drainage describes the river system of an area. The area drained by a single river system is called a drainage basin. any elevated area, such as a mountain or an upland which separates two drainage basins is known as water divide.

The streams within a drainage basin form certain patterns, depending on the slope of land, underlying rock structure as well as the climatic conditions of the area. These are dendritic, trellis, rectangular, and radial patterns. The dendritic pattern develops where the river channel follows the slope of the terrain. The stream with its tributaries resembles the branches of a tree, thus the name dendritic. A river joined by its tributaries, at approximately right angles, develops a trellis pattern. A trellis drainage pattern develops where hard and soft rocks exist parallel to each other. A rectangular drainage pattern develops on a strongly jointed rocky terrain. The radial pattern develops when streams flow in different directions from a central peak or dome like structure.

A combination of several patterns may be found in the same drainage basin.



DRAINAGE SYSTEM IN INDIA

The Drainage systems of India are mainly controlled by the broad relief features of the subcontinent. accordingly, the Indian rivers are divided into two major groups :

- (i) The Himalayan Rivers and
- (ii) The Peninsular Rivers.