



Geography of India

India

- India is the **seventh largest country** in the world with an area of 3287263 sq km
- Indian subcontinent is located in the Northern and Eastern hemisphere.
- India shares **longest boundary** with Bangladesh (4096 km), followed by China (3488 km), Pakistan (3323 km), Nepal (1751 km), Myanmar (1643 km), Bhutan (699 km) and Afghanistan (106 km).

Highest Peaks of India

Highest Peak	Height (in m)	State
Mt K2	8611	PoK (India)
Kanchenjunga	8598	Sikkim
Nanda Devi	7817	Uttarakhand
Saltoro Kangri	7742	Jammu and Kashmir
Kangto	7090	Arunachal Pradesh
Reo Purgyl	6816	Himachal Pradesh
Saramati	3841	Nagaland
Sandakphu	3636	West Bengal
Khayang	3114	Manipur
Anaimudi	2695	Kerala
Dodda Betta	2636	Tamil Nadu

Rivers and Lakes

Most of the rivers in India form part of four large river systems. These are

1. **Ganga** The source of the Ganga is at Gangotri (Uttarakhand). It drains into the Bay of Bengal after merging with the Brahmaputra and forming the Padma. It is considered the holiest river by Hindus. The place where the Yamuna meets the Ganga at Allahabad is called 'Sangam'.
2. **Brahmaputra** The source of the Brahmaputra is at Lake Mansarovar in China (Tibet). It drains into the Bay of Bengal after merging with the Ganga.
3. **Indus** The source of the Indus is near Lake Mansarovar in China (Tibet). It drains into the Arabian Sea in Pakistan. Its tributaries in India are Chenab, Jhelum, Ravi, Sutlej, Beas, Shyok and Zaskar.
4. **Peninsular Rivers** In the Indian peninsula, the Mahanadi, Godavari, Krishna and Kaveri rivers flow eastwards. They form deltas when they drain into the Bay of Bengal. The Narmada, Tapi and Periyar flow westwards. They form estuaries when they drain into the Arabian Sea.

Important Rivers of India

Name	Originates from	Falls into	Important Facts
<i>Ganga</i>	Combined Sources	Bay of Bengal	The most holy river according to Hindu. It is ranked and largest river in the world.
<i>Sutlej</i>	Mansarovar Rakas Lakes	Chenab	It is also known as Satadree. It is the Easternmost tributary of the Indus river.
<i>Indus</i>	Near Mansarovar Lake	Arabian Sea	Besides India, it also passes through China and Pakistan.
<i>Ravi</i>	Kullu Hills near Rohtang Pass	Chenab	–
<i>Yamuna</i>	Yamunotri	Ganga	The Taj Mahal situated on the banks of Yamuna river.
<i>Chambal</i>	Singar Chouri Peak, Vindhyan escarpment	Yamuna	–
<i>Betwa</i>	Vindhyanchal	Yamuna	–
<i>Brahmaputra</i>	Near Mansarovar Lake	Bay of Bengal	Guwahati is situated on the bank of river Brahmaputra.
<i>Narmada</i>	Amarkantak	Gulf of Khambat	It is the 5th longest river in the Indian sub-continent. It is also called the life line of Madhya Pradesh.
<i>Tapti</i>	Betul District in Madhya Pradesh	Gulf of Khambat	Surat city is located on the bank of Tapti river.
<i>Mahanadi</i>	Raipur District in Chhattisgarh	Bay of Bengal	It is a major river in the state of Chhattisgarh and Odisha.
<i>Sabarmati</i>	Mewar hill, Aravallis	Gulf of Khambat	–
<i>Krishna</i>	Western Ghats	Bay of Bengal	3rd longest river after Ganga and Godavari. Vijayawada is situated on the bank of Krishna river.
<i>Godavari</i>	Nasik district in Maharashtra	Bay of Bengal	It is also known as Dakshin Ganga. 2nd largest river in India. Andhra Pradesh is situated on the bank of river Godavari.
<i>Cauveri</i>	Brahmagir Range of Western Ghats	Bay of Bengal	It flows through the states of Karnataka and Tamil Nadu.

Important Lakes of India

Name of Lake	State	Important Fact
<i>Chilka Lake</i>	Odisha	It is a saline and lagoon lake (largest lake of India).
<i>Kolleru Lake</i>	Andhra Pradesh	It is a freshwater lake.
<i>Loktak Lake</i>	Manipur	It is a freshwater lake having inland drainage in Manipur.
<i>Lonar Lake</i>	Maharashtra	It is a meteorite crater lake in Buldhana area of Maharashtra. The water is highly charged with Sodium carbonates and Sodium chloride.
<i>Pangong Lake</i>	Jammu and Kashmir	It is a salty lake.
<i>Pulicat Lake</i>	Tamil Nadu & Andhra Pradesh border	It is a saline and lagoon lake.
<i>Sambhar Lake</i>	Rajasthan	It is a shallow lake which is saline, located near Jaipur.
<i>Tso Moriri Lake</i>	Jammu & Kashmir	It is a salty lake.
<i>Vembanad Lake</i>	Kerala	It is a lagoon lake.
<i>Wular & Dal Lakes</i>	Jammu and Kashmir	Wular lake was created due to tectonic activities.

Climate and Seasons

- India is characterised by a hot tropical climate which varies from region to region.
- The climate of India may be described as tropical monsoon.
- India's climate is affected by two seasonal winds i.e. the North-East monsoon and the South-West monsoon.
- The North-East monsoon commonly known as winter monsoon blows from land to sea whereas South-West monsoon known as summer monsoon blows from sea to land.
- A **season** is the division of the year marked by changes in weather, vegetation and amount of daylight. Seasons change due to Earth's movement around the Sun. Most parts of India have four seasons
- **Winter** It lies between Mid November to Mid March.
- **Summer** It lies between April to June.
- **Monsoon** It lies between Mid July to September.
- **Post-monsoon period** It lies between October to November.

Agriculture

India is essentially an agricultural land. Two-thirds of its population still lives on agriculture. It includes farming, animal rearing and fishing.

Agricultural Seasons in India

There are three major crop seasons in India

Kharif Sown in June/July, harvested in September/October, e.g., rice, jowar, bajra, ragi, maize, cotton and jute.

Rabi Sown in October/December, harvested in April/May e.g., wheat, barley, peas, rapeseed, mustard, grains.

Zaid Sown in February/March harvested in May/June, e.g., urad, moong, melons etc.

Soil

- Soil is the top layer of the Earth's surface made up of powdered rocks, decomposed vegetation

and bacteria. Soils in India are of four types. These are alluvial, black, red and laterite.

- Alluvial Soils are very fertile. They are good for growing sugarcane, paddy (rice), wheat and other cereal and pulse crops.
- Black Soil is best for growing cotton.
- Laterite soil is useful for growing tea and coffee.

Transportation in India

Railways

- Indian Railway system is the second largest in Asia and the fourth largest in the world.
- **The first train** ran in India between Bombay and Thane, a stretch of 34 km on 16th April, 1853.
- **The second train** ran between Howrah and Hooghly in 1854.
- The first electric train in India was **Deccan Queen**. It was introduced in 1929 between Bombay and Poona.
- **The longest train route** is 'Vivek Express' from Dibrugarh in Assam to Kanyakumari in Tamil Nadu. It covers a distance of 4273 km (2655 miles).
- The first Metro train was introduced in Kolkata (West Bengal) on **24th October, 1984**. The two stations connected were Dumdum and Belgachhia.
- Rapid metro train has been started in Gurgaon (Harayana) on 14th November 2013.

Road Transport

- India has one of the largest road networks in the world (48 lakh km approx). It consists of National highways, State highways; major/other district roads and rural roads.
- **NH 44** (3745 km) is the longest highway of India.
- **NH 47A** is the smallest highway of India.

Water Transport

- Water transport is the cheapest and the oldest mode of transport.
- National waterways 1 (NW1) is the longest waterway in India and runs from Haldia to Allahabad.

Air Transport

- JRD Tata was the first person to take a solo flight from **Mumbai to Karachi** in 1931.
- In 1935, the 'Tata Air Lines' started its operation between Mumbai and Thiruvananthapuram and in 1937 between Mumbai and Delhi.
- International Airports Authority of India and National Airports Authority were merged on 1995 to form Airports Authority of India.

Practice Exercise

1. Which place is the source of the River Ganga?
(a) Gangasagar (b) Yamnotri
(c) Gomukh (d) Gangotri
2. The rivers which meet at the 'Sangam' are
(a) Yamuna and Godavari
(b) Chambal and Ganga
(c) Ganga and Yamuna
(d) Ganga and Brahmaputra
3. The Brahmaputra starts from
(a) Mount Kailash (b) Lake Mansarovar
(c) Brahma Sarovar (d) Wular Lake
4. Which river is formed when the Brahmaputra and Ganga meet?
(a) Padma (b) Yamuna
(c) Kaveri (d) Sangam
5. The river flows Eastwards into the Bay of Bengal.
(a) Periyar (b) Tapi
(c) Mahanadi (d) Narmada
6. The river drains into the Arabian Sea.
(a) Padma (b) Indus
(c) Ganga (d) Kaveri
7. Which of the following is the largest fresh water lake in India?
(a) Wular (b) Sambhar
(c) Pangong Tso (d) Pulicat
8. Which of the following lakes lies in Kerala?
(a) Loktak (b) Dal
(c) Bhimtal (d) Vembanad
9. Which of the following lakes is a brackish or salt water lake?
(a) Kolleru (b) Pulicat
(c) Dal (d) Nainital
10. In which state is the largest salt water lake of India?
(a) Rajasthan (b) Odisha
(c) Jammu and Kashmir (d) Karnataka
11. Which of the following conditions gives the weather of a place in India?
(a) The conditions of the atmosphere averaged over a few months
(b) The measures of wind speed and direction, temperature and rainfall averaged over a few days
(c) The conditions of the atmosphere at a particular time
(d) The average temperature over one year at that place
12. The conditions that tell us about the climate of a hill station during the summer there are
(a) The average temperature and atmospheric pressure
(b) The average rainfall and humidity
(c) The average wind speed and direction
(d) All of the above
13. On what principle do seasons change?
(a) The amount of rainfall
(b) Changes in temperature
(c) Due to Earth's movement around the Sun
(d) Due to the moon's movement around the Earth
14. Most areas of India have seasons.
(a) six (b) four
(c) three (d) two

- 15.** When is the North-East monsoon period in Tamil Nadu?
 (a) October to November
 (b) November to February
 (c) June to September
 (d) January to March
- 16.** Name the season which exists in most of India during March to May every year.
 (a) Post-monsoon
 (b) Monsoon
 (c) Summer
 (d) Winter
- 17.** A season can be characterised by changes in
 (a) number of daylight hours
 (b) vegetation
 (c) weather
 (d) All of the above
- 18.** Which of the following is not a zone of climate?
 (a) Arid (b) Tropical
 (c) Temperate (d) Frigid
- 19.** In which of the following zones is agriculture not normally done?
 (a) Temperate (b) Frigid
 (c) Sub tropical (d) Tropical
- 20.** Grasslands are not found in the zone.
 (a) Sub temperate (b) Tropical
 (c) Temperate (d) Frigid
- 21.** Which of the following is contained in soil?
 (a) Decomposed vegetation
 (b) Bacteria
 (c) Powdered rocks
 (d) All of the above
- 22.** What kind of land is required to grow crops?
 (a) Flat land (b) Mountainous land
 (c) Forested land (d) Rocky land
- 23.** Black Soil is best for growing
 (a) tea (b) sugarcane
 (c) cotton (d) coffee
- 24.** Cereals and pulse crops are best grown in soil.
 (a) laterite (b) alluvial
 (c) red (d) black
- 25.** Soil erosion occurs when the by the action of wind or water.
 (a) soil is collected together
 (b) rocks and soil join together
 (c) soil cover is removed
 (d) decomposed vegetation mixes with rocks
- 26.** is the longest highway of India?
 (a) NH 44 (b) NH 22
 (c) NH 21 (d) NH 10
- 27.** First metro train was introduced in
 (a) Delhi (b) Ahmedabad
 (c) Kolkata (d) West Bengal

Answers

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