



# AB TUTORIALS

Bhatara Law Institute (Estd. 1994)

*Creating value in lives*

**2017**

---

**Regd Off** : B-1/14, LG Floor Hauz Khas, New Delhi-110016,  
**Tel Nos** : 91-1142270009, **Email**: [info@abtutorials.com](mailto:info@abtutorials.com), **Website**: [www.abtutorials.com](http://www.abtutorials.com)  
For Enquiry & Registration : 80-1038-1038



## PHYSICAL GEOGRAPHY

### ATMOSPHERE

#### COMPOSITION

The composition of the atmosphere is taken as the composition of pure dry air, which constitutes mainly of nitrogen (78%) and oxygen (21%) that together makes up 99% of the air by volume.

#### STRUCTURE OF THE ATMOSPHERE

The lowermost part of the Atmosphere in which we live, and which is the theatre for almost all the weather phenomena is known as the **troposphere**. The height of the troposphere at the poles is about 8 km, while at the equator it is about 16 km. This is because there is greater heating at the equator.

Above troposphere is the stratosphere, which is important primarily because of the presence of ozone. This layer of calm and clear air is preferred for high - speed jet flights because of the absence of air pockets. Also, the near absence of water vapour in this layer prevents the formation of clouds, thus providing pilots with better visibility.

Above stratosphere is mesosphere, which is more of a transitional layer. Above mesosphere lies the ionosphere, which has electrically conducting layers that help in radio communication.



- A Wet Day is a period of 24 hours during which at least 1 mm of rainfall is recorded. While a Rainy Day is a period of 24 hours, during which at least 0.25 mm of rainfall is recorded.
- Hottest Place. Temperature of over  $49^{\circ}\text{C}$  were recorded in Death Valley, California on 43 consecutive days in July and August 1917.
- Coldest Places. Polyus Nedostupnosti (Pole of Inaccessibility). Antarctica has an extrapolated annual mean temperature of  $-58^{\circ}\text{C}$ .
- The coldest measured annual mean temperature is  $-57^{\circ}\text{C}$ , recorded at Plateau Station, Antarctica. The coldest permanently inhabited places in the world is the village of Oymyakon in Siberia, Russia.

## SOME IMPORTANT FACTS

Most destructive of weather disturbances	<b>Tornado</b>
Atmosphere layer that selectively absorbs ultraviolet radiation	<b>Ionosphere</b>
Varied colours of red and orange at sunrise and at sunset are due to	<b>scattering of light by dust Particles</b>
Immediate cause of wind is	<b>Pressure difference</b>
A very short lived fast wind	<b>Squall</b>
Frozen raindrops are called	<b>Sleet</b>
Condensation at dew point below $0^{\circ}\text{C}$ produces	<b>Frost</b>



## WORLD GEOGRAPHY

USA	
The 'Big Apple' describes the city of	New York
The rocket launching centre of USA	Cape Kennedy, Florida
The country having won the Davis Cup maximum number of times	USA
National sport of USA	Baseball
Iron and steel capital of the world	Pittsburg
The lowest point in the USA is	The Death Valley (86 m below sea level)
The city of Golden Gate	San Francisco
The capital of Hawaii also known as "the cross roads of pacific"	Honolulu
The South Africa town where Mahatma Gandhi on being thrown out of the train, waved to fight racism	Pietermaritzburg
The Kalahari Desert is situated between the rivers	Orange and Zambezi
The hottest place in the world	Al-Azizhiya, Libya
Source of Blue Nile.... And White Nile	L. Tana, L. Victoria
The nomadic herders of Sahara	Tuaregs
Administrative capital of S. Africa	Pretoria
Land of Gold and Diamonds	South Africa
Kimberley is famous for	Diamond



<b>USA</b>	
A new country carved out of Ethiopia during 1990s	Eritrea
Place of origin of coffee	Ethiopia
The Victoria Fall was discovered by	David Livingston
The Nomadic hunters and food gatherers of Kalahari Desert	Bushman
Aborigines of Australia	Bindibus
The aborigines of New Zealand of Polynesian descent	Maoris
The first European to discover New Zealand	Abel Tasman



## INDIAN GEOGRAPHY

- **India: Physiography** – India is a country of great geographical extent. It extends from  $8^{\circ}4'$  north to  $37^{\circ}6'$  north latitude and  $68^{\circ}7'$  east to  $97^{\circ}25'$  east longitude thus, its latitudinal and longitudinal extent is about 30 degrees. Away from the main land the southernmost point of the country lies in the **Andaman and Nicobar Island** and is known as **Pygmalion point** or **Indira point**, which is located at  $6^{\circ}45'$  north latitude. The Tropic of cancer passes through the center of the country.
- Total area of the country – **32,87,000 sq.km.** (2.4% of the total world area).
- Total population (2001 census) – **10270152247** (16% of the total world's population).
- It is **7<sup>th</sup> largest and 2<sup>nd</sup> most-popular** country in the world.
- **North-South extent (length) – 3214km.**
- **East-West extent (width) – 2933 km.**
- **Total coastline (including island's coastline) – 7517 km.**
- Mainland coastline – **6200 km.**
- Total land frontier – **15,200 km.**
- The longitudinal extent of India from Saurashtra (west of Ghuar Mota in Gujarat) in the West and Arunachal in the East is about –  $30^{\circ}$ . The Earth takes complete rotation on its axis, that is, it moves through  $360^{\circ}$  in 24 hour. Therefore, it moves through  $1^{\circ}$  longitude in 4 minutes.  $\left(\frac{24 \times 60}{360}\right)$  Thus the difference of local Time between Saurashtra and Arunachal Pradesh is  $30 \times 4 = 120$  minutes (or 2 hours). Since,



Arunachal is towards the east it will experience the sunrise about 2 hours before the sunrise in Saurashtra.

- Latitudinal extent also has its own impact as temperature, rainfall and vegetation vary with latitude. The difference between the largest and shortest day increase with latitude. The difference between the longest and shortest day in Kerala is hardly 45 minutes whereas this difference may be as large as 4 hours in Leh and Ladakh.
- **Standard meridian of India (82° 30' E) passes through UP, MP, Chhattisgarh, Orissa & AP.**
- **Gulf of Khambhat** – Oil deposits and fishing ground in Arabian Sea.
- **Palk Bay** – Pearl fisheries in Bay of Bengal.
- **Gulf of Mannar** – Asia first marine biosphere reserve in Bay of Bengal.
- **Gulf of Kutch** – In Arabian Sea.
- Thang la and Niti la – pass in Uttarakhand.
- **Zojila** – it lies in Zaskar Range of Trans-Himalayas in Jammu & Kashmir. **It connects Srinagar and Leh.**
- Burzil – It lies in Great Himalayas in J&K. It connects Pak-occupied Kashmir and Kashmir valley.
- Baralach la – This pass is in Great Himalayas and connects Himachal and Kashmir.
- Rohtang – It connects Manali and Leh through road. It is a source for Ravi and Beas river.
- **Shipki la** – It lies in Himachal in **Inner Himalayas. It is trade route between India and China.**
- Lipulekh – It lies in Uttarakhand, connects India-Tibet.
- Jelep la – It lies in the greater Himalayas in Sikkim, connects through Chumbi Valley.
- Nathu la – **It lies in Sikkim and connects India and China.**



**VERY IMPORTANT POINTS JUST BEFORE THE EXAMINATION**

Western Ghats are also called as	Sahyadri Ranges
The southern most point of India is	Indira Point
The biggest fish producing State in India is	Kerala
The type of forest which occupy the western Ghats are	Evergreen
Manchester of South India is	Coimbatore
The most indigenous atomic power plant is situated at	Kalpakkam
The National Highway No. 1 connects	Delhi to Amritsar
The river in India which flows westward is	Narmada
Mahatma Gandhi Setu is built over the river	Ganga
In India diamonds are quarried from	Panna
Bandipur is known for	Wildlife Sanctuary
Zojila is a pass between	Kashmir valley and Ladakh
Two seas of water-bodies connected by a narrow stretch of water is known as a	Strait
Iron ore from Kudremukh mines is exported from	Mangalore
The largest producer of coffee in the world is	Brazil
When the earth is at the maximum distance from the Sun, it is called	Aphelion



The State which has developed wind energy is	Gujarat
The country which has highest percentage of land under cultivation is	China
The scale that measures the intensity of earthquakes is called as	Richter scale
The planet which is called the evening star is	Venus
Maoris is the term used for the aboriginal people of	New Zealand
Name the sea whose boundaries touch three continents	Mediterranean Sea
Corbett National Park is situated at	Nainital
The currency of Russia is	Rouble
The petroleum was discovered first of all in India in	Digboi
The western extent of Himalayas is called	Hindukush
The biggest plateau of the world is	Plateau of Africa
The employment growth rate is maximum in	Madhya Pradesh
The employment growth rate is maximum in	Construction sector
The State in India which has the least population density is	Arunachal Pradesh