

separated by 15° of longitude.

- The Earth completes a rotation around the Sun every 24 hours.
- There are 360° of longitude, so the Earth rotates through 15° every hour. ($360/24$)
- However the local time of a people depends on the meridian of longitude that passes through it.

8. How are the latitudes and longitudes useful to use.

(A) Latitude and Longitudes are used to accurately plot the location of a place on the surface of the earth.

Longitude and Latitude

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6. Why is a standard meridian important for a country?

(A) The local time of a place depends on the meridian of longitude that passes through it.

There would be great confusion if each place in the country followed its local time.

It would not be possible to prepare a common railway or airlines time table for the country if

each place were to follow a different local time.

To avoid this confusion, most countries follow a standard time.

7. How can we measure the time difference between countries? Explain giving an example.

The Earth is divided into 24 time zones, each

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- 1) A latitude is the angular distance between the equator to the poles. (True)
 - 2) All lines of latitude are of the same length. (False)
 - 3) The North temperate zone lies to the north of the Arctic Circle. (False)
 - 4) The 0° longitude passes through the British Royal Observatory. (True)
 - 5) A country can have more than one standard time. (True)

III Answer the following

(1) Define the globe.

A globe is a three-dimensional model of the

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Latitude and longitude

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Locating places on the Globe.

(1) The Equator is 0° latitude and is a great circle.

(2) The Antarctic Circle is found in the Southern Hemisphere.

(3) The temperature zone falling between $23\frac{1}{2}^\circ$ N and $23\frac{1}{2}^\circ$ S is called the torrid zone.

(4) The distance between lines of longitude decrease towards the poles.

(5) The standard meridian of India is $82^\circ 30'E$.

(II) True or False

India, It is half an hour ahead of P.W.S.

(5) What is 'solar time'?

(A) Before the 180 as the length of the shadow cast by an object indicated the time. Whenever the sun was directly overhead, it was considered to be noon. This was called solar time or local time.

(6) Why is a standard meridian important for a country?

Tropic of Cancer and the Tropic of Capricorn.

As these two latitudes get the direct rays of the sun, this is the hottest zone.

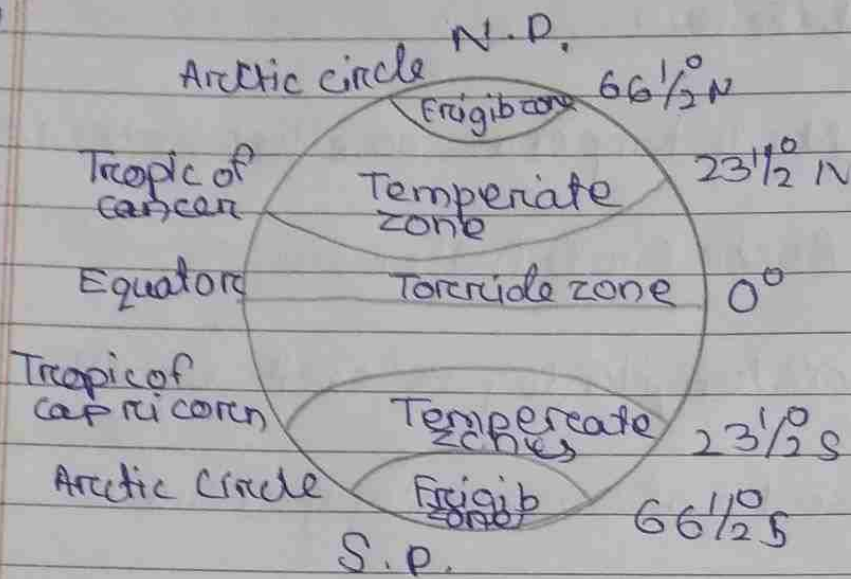
(4) Why is Bangladesh half an hour ahead of India?

(A) As the Earth rotates from West to East the places which are to the East are ahead of times, and those to the West are behind it.

* The standard meridian of Bangladesh is $90^{\circ}E$. It is 7.5° away from the central meridian of India which is $82.5^{\circ}E$. Since the sun rises there half an hour ahead of

(Q2) Draw a neat diagram showing the temperature zones of the Earth.

(A)



(3) What makes the torrad zone the hottest among the temperature zones?

(A) Due to the tilted nature of the Earth's axis the Sun appears to move between the