

Latitude & Longitude:

Locating Places on the Globe

Exercises - Q/A

I. Fill in the blanks.

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 decreases towards the poles.

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

II. True or false?

1. A latitude is the angular distance from the equator to the poles. True

2. All lines of latitudes are of same length. False

3. The north Tropic/Equator zone lies to the north of the Arctic Circle. True

4. The 0° longitude passes through the British Royal Observatory. False

5. A country can have more than one standard time. True

LATITUDES AND LONGITUDES

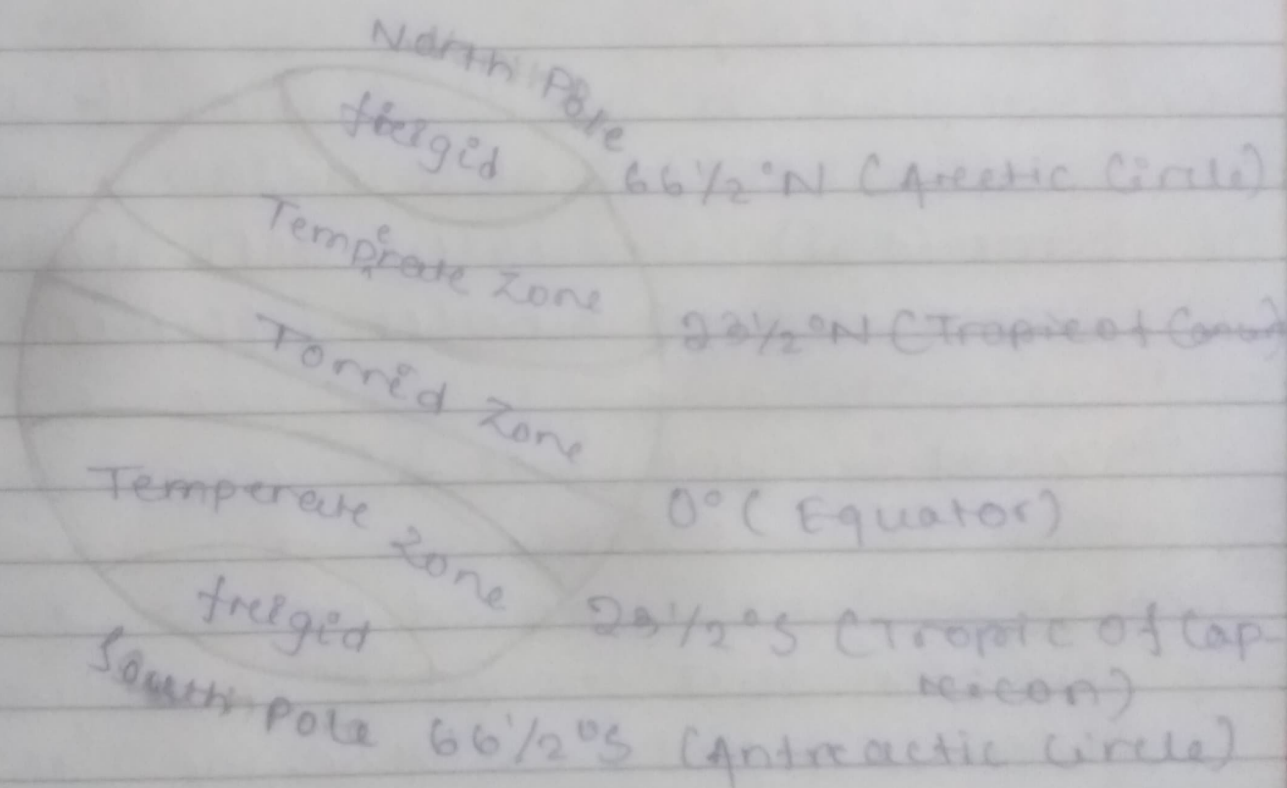
Exercise

III. Answer the following

1. Define the globe.

ans. Globe is a miniature form of the Earth.

2. Draw a neat diagram showing the temperature zones of the Earth.



3. What makes the torrif zones the hottest among the temperature zones?

ans. The torrif zones lie between the Tropic

of Cancer and Tropic of Capricorn. The sun is exactly over the head once a year, on all the latitudes between these two tropics. The sun's rays falling exactly overhead gives out more heat than slanting sun rays. Therefore Tropic of Cancer is the hottest among the temperature zones.

4. Why is Bangladesh half an hour ahead of India?

ans- Bangladesh standard time (BST) is technically GMT (+6:00). Indian standard time (IST) is usually GMT (+5:30), so there is a 30 minutes difference there.

5. What is solar time?

ans- Solar time is based on the position of the sun. It is the time we all use where a day is defined as 24 hr, the average time that it takes for the sun to return to its highest point. Local noon in solar time is the moment when the sun is at its highest point in the sky.

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

Ans. Standard meridian is useful for a country because it shows and fixes a particular time for the country. A country may have many longitudes in between and there is a time gap of 4 minutes between each longitude. Therefore standard meridian should be there in each country for the equal time.

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

Ans. The earth has 360 imaginary lines are called longitude or meridians running vertically between the poles. Each of these longitudes is called a degree. The 0 degree longitude passing through Greenwich, near London, is considered as standard and the time of all other time zones are calculated accordingly. The time difference between each longitude (each degree) is 4 min. So if it is 12 noon at Greenwich (0 degree)

it would be 12:04 pm at 1 degree meridian and so on. In India, the standard meridian is 82 and half degree. So the time difference between Greenwich and India is 82.5×4 , which is 330 min (5 hours 30 minutes)

Q. How are the lines of latitude and longitude useful to us?

Ans - As lines of latitudes and longitudes cross each other, they form a grid. Any position on earth can be located if latitude & longitude are known. The grids on the maps helps us find a particular location. Longitudes also help us to calculate the time of a particular place.

