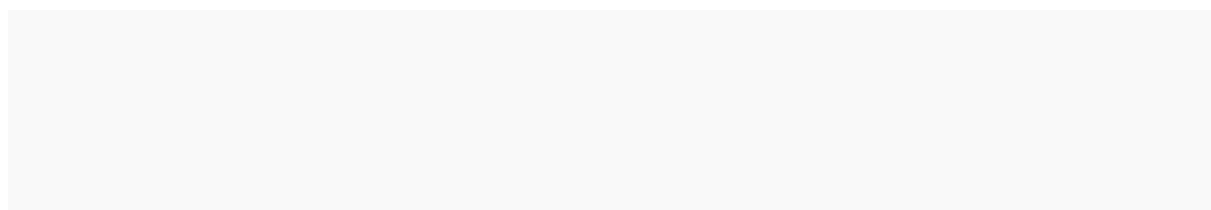


B. Differentiate between the following:

1. Latitudes and Longitudes

Latitudes	Longitudes
(a) They are imaginary lines that run from west to east.	They are imaginary lines that run from the North Pole to the South Pole.
(b) They are parallel to each other.	They are semicircles.
(c) The length of parallels decreases towards the poles.	The length of all longitudes are the same.
(d) The distance between two parallels remains the same at all points.	The distance between two longitudes decreases towards the poles.
(e) They are used as a reference, along with the longitude, to locate a place on the map.	They are used as a reference, along with the latitude, to locate a place on the map. They also help in calculating the time of the particular place.



2. Torrid Zone and Frigid Zone

Torrid Zone	Frigid Zone
(a) All places located between the Tropic of Cancer and the Tropic of Capricorn fall in the torrid zone.	In the north, it lies between the Arctic Circle and the North Pole. In the south, it lies between the Antarctic circle and the South Pole.
(b) They receive vertical rays of the Sun.	They receive extreme slanting rays of the Sun.
(c) They receive maximum amount of sunlight.	They receive minimum amount of sunlight.
(d) The climate is very hot in this region.	The climate of this region is very cold throughout the year.

- C.
1. USA, Canada, Russia, China and India
 2. In India, $82\frac{1}{2}^{\circ}$ E longitude which passes through Allahabad is used as reference for the standard time for the whole country.
 3. Grid is the network of innumerable latitudes and longitudes . It helps us in locating the position of a place on the globe.
 4. International Date Line is the 180° E and W in the same meridian. It is drawn on the map in a zig-zag manner to avoid confusion of date within a country or island.
- D.
1. The main features of the parallels are:
 - (a) They are horizontal lines that run from the west to east direction.
 - (b) The length of the parallels starts decreasing as one moves away from the Equator towards the Poles.
 - (c) The distance between any two parallel remains the same at all locations.
 - (d) The Equator, which is the 0° latitude, divides the Earth into the Northern and Southern Hemispheres.
 - (e) Parallel lines like the Tropic of Cancer, the Tropic of Capricorn and the Arctic Circle and the Antarctic Circle divide the Earth into different heat zones.
 2. Different heat zones have different climates because the amount of sunlight varies due to the spherical shape of the Earth. Those places that receive the greatest amount of sunlight are hotter than those places that receive less amount of sunlight.

The temperate zone receives slanting rays of the Sun, so they receive less heat from the Sun. The North Temperate Zone lies in the Northern Hemisphere between the Tropic of Cancer and the Arctic Circle. The South Temperate Zone is located in the Southern Hemisphere between the Tropic of Capricorn and the Antarctic Circle.

3. (a) Longitudes divide the Earth into the Eastern and the Western Hemisphere.
- (b) The Earth rotates from the west to east and completes one circle of 360° in about 24 hours.
- (c) The Longitude passing through Greenwich is the Prime Meridian that has been taken as the standard meridian by all countries of the world.
- (d) The difference in time between any two places is due to the fact that they are located at different longitudes or meridians.

- E. 1. If that were so, then if one crossed Greenwich from east to west, one would gain a day. The longitude at Greenwich being 0° , the longitudes would then be numbered from 0 to 360 degrees, with Greenwich being both 0° and 360° longitude. Also, instead of Japan, Ireland would be known as the 'Land of the Rising Sun'.
2. Because the sun shines simultaneously on all places along the same longitude irrespective of the latitude

