

Q. Answer the following questions briefly.

a) What is the true shape of the Earth?

Ans- The true shape of the Earth is spherical because as the Earth rotates the Earth bulges at the equator and flattens the poles flattens so it looks like a sphere.

b) What is a globe?

Ans- A globe is a three-dimensional model of the Earth in miniature. It is a true representation of the Earth. The globe gives the correct shape and size of continents and countries and shows distances without distortion. It is more accurate than a flat map, as it follows the curvature of the Earth.

c) What are the three latitudinal value of the Tropic of Cancer?

Ans- The latitudinal value of the Tropic of Cancer is $23\frac{1}{2}^{\circ}$ N of the terrestrial equator. This latitude corresponds to the northernmost declination of the Sun's ecliptic to the celestial equator.

e) What are the three heat zones of the Earth?

Ans- The three heat zones are torrid zone, temperate and frigid zone.

(i) Torrid zone - It lies between 0° equator and $23\frac{1}{2}^{\circ}$ N Tropic of Cancer and $23\frac{1}{2}^{\circ}$ S

Tropic of Capricorn,

This zone experiences hot weather season.

ii) Temperate Zone :- The temperate zone lies between $23\frac{1}{2}^{\circ}$ N and S, The tropic of Cancer and Tropic of Capricorn and $66\frac{1}{2}^{\circ}$ N and S, Arctic Circle and Antarctic Circle.

This zone experiences moderate and comfortable cool combination of seasons.

iii) Frigid Zone :- It lies between $66\frac{1}{2}^{\circ}$ N and S, Arctic Circle and Antarctic Circle and 90° N and S, North Pole and South Pole.

This zone experiences extreme cold weather seasons.

e) What are the parallels of latitude and meridians of longitudes?

Ans - Parallels of latitude are the imaginary lines which run parallel from the equator to the poles whereas the lines of reference running from the North Pole to South Pole are called meridians of longitude.

f) Why does the Torrid Zone receive the maximum amount of heat?

Ans - The torrid zone receives the maximum amount of heat throughout the year because the rays of the sun fall directly vertically on this region. This is located between ~~the~~ tropic of Cancer and Tropic

of Capricorn in $23\frac{1}{2}^{\circ}$ N to $23\frac{1}{2}^{\circ}$ S.

Q) Why is it 5:30 PM in India and 12:00 noon in London?

Ans- As the earth rotates from West to east, those places which lie to the east of Greenwich are ahead than those places which lie to the west of Greenwich. The earth rotates 1° in 4 minutes. Thus if India is located to the east of Greenwich at 82° E. So, we will multiply 82.5° by 4 which will be 330 minutes or 5 hours 30 minutes. Therefore, the time in India is 5 hours 30 minutes ahead of London. So if the time in London is 12:00 noon, we will add 5 hours 30 minutes to it which will be 5:30 pm.