

Long Answer Questions

Q.1. How is latitude helpful?

Ans.

- i. All parallel circles from the equator up to the Poles are called Parallels of Latitude.
- ii. The Equator represents the zero latitude.
- iii. All parallels north of the Equator are called north latitude.
- iv. All parallels south of the Equator are called south latitude.
- v. It helps in telling us the temperatures of that area.

Q.2. What are the various latitudinal patterns on the earth?

Ans. A number of latitudes can be drawn on the face of the globe but in order to have a better visual effect and convenience, geographers draw only seven, which are as follows:

1. Equator, (0°)
2. North Pole, (90°) North
3. South Pole, (90°) South
4. Tropic of Cancer, ($23\frac{1}{2}^{\circ}$ N)
5. Tropic of Capricorn, ($23\frac{1}{2}^{\circ}$ S)
6. Arctic Circle, ($66\frac{1}{2}^{\circ}$ N)
7. Antarctic Circle, ($66\frac{1}{2}^{\circ}$ S)

Q.3. Write a short note on the Torrid Zone.

Ans. The mid-day sun is exactly overhead at least once a year on all latitudes in between the Tropic of Cancer and the Tropic of Capricorn. This area, therefore, receives the maximum heat and is called the 'Torrid zone'.

Q.4. Write a short note on Frigid Zone.

Ans. This zone lies in between $66\frac{1}{2}^{\circ}$ North latitude (Arctic Circle) and 90° North latitude (North Pole) in both the hemispheres. The angle of sun's rays are slanting and hence lesser heating takes place due to which temperature is always below freezing point (very cold area). This is the only zone where the length of days and nights is maximum. Or we can say that poles have days and nights of six months each.

Q.5. How does longitude affect time?

Ans.

- i. When the Prime Meridian of Greenwich has the Sun at the highest point in the sky, all the places along this meridian will have mid-day or noon.

- ii. As the earth rotates from West to East, those places east of Greenwich will be ahead of Greenwich time and those to the west will be behind it.
- iii. The earth rotates 360° in about 24 hours, which means 15° an hour or 1° in four minutes.
- iv. Thus, when it is 12 noon at the Greenwich, the time at 15° west of Greenwich the time will be behind Greenwich time by one hour, i.e., when it will be 11.00 am.
- v. Similarly, at 180° , it will be midnight when it is 12 noon at Greenwich.

Q.6. How do we distribute the geographic features over the earth?

Ans.

- i. To understand the distribution of geographic features and locations over the earth's surface, we require some system of accurate location.
- ii. The features can be represented on the map and a globe with the help of the points of references.
- iii. The two basic points of references are North Pole and South Pole which form the basis for the grid system.
- iv. The two sets of lines which intersect each other at the right angle on the face of the earth forms the grid.
- v. These two sets of lines are known as Parallels of Latitude and Meridians of Longitude which criss-cross in such a way that they make a network at the face of the earth.

Q.7. Why do we need standard time?

Ans.

- i. The local time of places which are on different meridian are bound to differ and bound to create confusion and inconvenience.
- ii. For example, it will be difficult to prepare a time table for trains which cross several longitude.
- iii. In India for instance there will be difference of about 1 hour and 45 minutes in the local time of Dwarka in Gujarat and Dibrugarh in Assam.
- iv. Therefore, it is necessary to adopt local time of some central meridian of a country as the standard time for the country.