

HOTS (Higher Order Thinking Skills)

Q.1. What is the importance of longitude?

Ans.

- i. The importance of longitudes lies in the fact that it facilitates the calculation of the local time of a place very easily.
- ii. Secondly if one knows the latitudes and longitudes of a place, he can easily locate it either on the map or on a globe without wasting much of time. For example, if Chennai is located on the 80° east longitude then we can easily make out its location.

Q.2. How is IST calculated?

Ans.

- i. In India, for instance, there will be a difference of about 1 hour and 45 minutes in the local times of Dwarka in Gujarat and Dibrugarh in Assam.
- ii. It is therefore, necessary to adopt the local time of some Central Meridian of a country as the standard time for the country.
- iii. In India, the longitude of $82\frac{1}{2}^\circ\text{E}$ ($82^\circ 30'\text{E}$) is located as the standard meridian.
- iv. The local time at this meridian is taken as the standard time for the whole country.
- v. It is known as the Indian Standard Time (IST).