



মণিগোবর্ধনোঃ ঔঃ নক্ষত্রোঃ (ঔঃ)

**DEPARTMENT OF EDUCATION (S)**  
Government of Manipur

## Lesson 2

### Globe : Latitudes and Longitudes

#### Notes :-

- The small spherical model of the earth is known as **the globe**.
- A globe can be handle or move with left hand towards right because our earth rotates from west to east in the anticlockwise direction.
- We enjoy different season on the earth as the axis of the earth is inclined at an angle of  $66\frac{10}{2}$  to its orbital plane.
- The imaginary circular line running half way between the two poles is known as **equator**.
- The value of the equator is  $0^{\circ}$ .
- **Latitude** is the angular distance of a place north or south of the equator.
- The five major **parallels** of latitudes from north to south are called: **Arctic Circle, Tropic of Cancer, Equator, Tropic of Capricorn, and the Antarctic Circle**.  
On a maps where the orientation of the map is either due north or due south, latitude appears as horizontal lines.
- The parallels of latitude divide the earth into different heat zones. There are three types of heat zones –
  1. Torrid Zone,
  2. Temperate zone and
  3. Frigid zone
- **The Torrid Zone:** The Torrid Zone lies between the Tropic of Cancer and the Tropic of Capricorn due to which it is also called **Tropical zone**.
- **The Temperate Zone:** There are two temperate zone. **The North Temperate Zone** lies between the Tropic of Cancer and the Arctic Circle. **The South Temperate Zone** lies between the Tropic of Capricorn and the Antarctic Circle. In the temperate zones the four seasons spring, summer, autumn and winter are clearly felt.

- **The Frigid Zone:** There are two frigid zones. **The North Frigid Zones** lies between the Arctic Circle and the North Pole. **The South Frigid Zones** lies between the Antarctic Circle and the South Pole.
- Longitude of a place is the angular distance east or west of the prime meridian measured from the centre of the earth.
- **Meridians of longitude** are a number of imaginary lines drawn vertically by joining the two poles of the earth.
- The longitude which passes through Greenwich observatory near London is called the **Prime Meridian**.
- All the meridians of longitude are equal in length.
- Longitude of a place is the angular distance east or west of the prime meridian measured from the centre of the earth.
- Local time is the time taken when the sun is overhead at the longitude where we call it noon or midday.
- The standard meridian of India is  $82^{\circ}30'$  E. The local time of this meridian is followed all over the country. This is known as **Indian Standard Time**.
- Indian Standard Time(IST) is 5 hours 30 minutes ahead of Greenwich Mean Time(GMT)
- Most of the countries have its own particular standard time, and it remains the same for the whole country.

( Russia has 11 time zones whereas United States has 5 time zones. Each zone differs from the adjacent one by one hour. India has only one time zone)

