

Q.1 Answer the following questions briefly.
(A) What is the angle of inclination of the earth's axis with its orbital plane?

Ans. The angle of inclination of the earth's axis with its orbital plane is $66\frac{1}{2}^{\circ}$.

(B) Define rotation and Revolution.

Ans. Rotation \rightarrow is the movement of earth on its axis which takes 24 hours to complete.

• Revolution \rightarrow is the movement of earth on the axis around the sun which takes 365 days (A year) to complete one revolution around the sun.

(C) What is a leap year?

Ans. The year in which February is of 29 days instead of 28 days is called a Leap year. Thus a Leap year is of 366 days instead of 365 days.

(E) What is an equinox?

Ans. On the 21st March and September 23rd, direct rays of the sun fall on equator. At this position, neither of poles is tilted towards the sun so, the whole earth experiences equal days and equal nights.

① Differentiate between the summer and winter solstices.

Ans.

Summer solstice	Winter Solstice
When the Southern hemisphere experiences the winter season and it is summer in the Northern hemisphere. The	

① Difference Between the summer and winter solstices.

<u>Ans.</u> Summer Solstice	Winter Solstices
<ul style="list-style-type: none">In the Northern Hemisphere. The longest day and the shortest night occur on 21st June. AT this time the Southern Hemisphere occurs the shortest day and the longest night. This position of earth is called summer solstice.	<ul style="list-style-type: none">In the Northern Hemisphere the shortest day and the longest night occur on 22 Dec. AT this time in the Southern Hemisphere it occurs the longest day and shortest night. This position of earth is known as winter sol.

(F) why does the southern Hemisphere experience winter and summer solstice in different time than that of the Northern Hemisphere?

Ans. The Earth is always revolving and it is divided into two hemispheres. The part of the earth which faces the sun experiences summer and the part away from the sun experiences winter. Therefore, Southern Hemisphere experience

winter and Summer solstice at different times than that of the Northern Hemisphere.

(g) Why do the Poles experience about six months day and six months night?

Ans. Because the Earth is tilted on its axis.

When the Northern hemisphere is tilted towards the sun, the North Pole is inclined towards the sun, it experiences continuous daylight for six months. These conditions are reversed when the South hemisphere is tilted towards the sun.

Q.2. Tick the correct answers

(a) ~~the~~

Q.3. Fill in the blanks

do this yourself