

Short Answer Questions

Q.1. How does rotation affect the earth?

Ans.

- i. It is because of the rotation that days and nights take place.
- ii. Half of the earth receiving sunlight experiences day and the other half night.
- iii. This alternate day and night phenomenon keeps going on over time. These days and nights are not equal in all parts of the world.
- iv. It is attributed to the inclination of the earth that day and night is of equal length at the equator and unequal as we move towards the pole.
- v. Again, here we can refer to the fact that the earth is inclined to the plane of its orbit ($66\frac{1}{2}^\circ$) which makes one of the hemispheres to lean against the sun for a greater period, let's say six months.

Q.2. How does earth's revolution take place?

Ans.

- i. Another type of movement is earth's revolution around the sun.
- ii. This movement is called revolution.
- iii. The path followed by earth to make one revolution round the sun is called orbit of the Earth.
- iv. The Earth revolves round the sun in an elliptical orbit and hence takes about 365 days and 6 hours for completing one revolution.
- v. In this way, we can say that earth has two kinds of motions: one is rotation (on its axis) and another is revolution (around the sun).

Q.3. What would happen if the Earth did not rotate?

Ans.

- i. The portion of the earth facing the sun would always experience day, thus bringing continuous warmth to the region.
- ii. The other half world remains in darkness and be freezing cold all the time.
- iii. Life would not have been possible in such extreme conditions.