Q4 Write the following.

① Solar Constant

② Hour Angle

③ Zenith Angle.

④ Global Radiation.

① → This is the amount of energy received from the Sun in unit time on a unit area perpendicular to sun's ray at the mean distance from the Sun.

② It is the angle through which the earth must be rotated to bring the meridian of a point directly in line with the sun ray

③ It is the vertical angle between the sun ray and line perpendicular to the Horizontal plane through the point

$$\theta_z = \frac{\pi}{2} - \alpha.$$

④ Global Radiation that has not been absorbed or scattered and reaches the ground directly from the Sun is called Global Radiation.