

Section-3

Ans 4-) Solar constant

This is the amount of energy received from the sun in unit time on a unit area \perp to sun's rays at the mean dist. from the sun.

Hour angle = It is the angle through which the Earth must be rotated to bring the meridian of a point directly in line with sun's rays.

$$\underline{\text{Zenith angle}} = \boxed{\theta = \frac{\pi}{2} - \alpha}$$

It is the vertical angle b/w the sun's ray and line \perp to the horizontal plane through the point.

Globe radiation = It is define as solar radiation passes through the earth atm. and are subjected to scattering and atm absorption and a part of scattered radiation are reflection back in space.