WEEK7_ GANHUI 10712558

Task 1 Provide a summary of the main concepts that went through about solar radiation (formulas are not needed)

The solar radiation is a type of electromagnetic waves which emitted by sun.
Solar radiation entering the Earth's atmosphere is absorbed and scattered by atmospheric gases, clouds, and the Earth's surface.
Direct solar radiation is the radiation that maintained the direction of incidence.
The absorbed solar energy is converted into internal energy and emit in long wave in all directions.
Different angle of the sun to the zenith will lead to different effect on the earth. When the sun directly overhead, the sun to the zenith crosses the minimum thickness of the atmosphere. When the sun at sunset or sunrise the sun with an elevated zenith angle crosses a large thickness of the atmosphere.
Solar radiation depends on:

1. the sun position in the sky (altitude and azimuth angles), which changes daily and seasonally
2. the weather condition
3. the site altitude over the sea level
4. sunshine hours