WEEK 03 - Assessment

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment. Due on 2018-09-05, 23:59 IST.

1) The output of a PV cell is 2 W at an insolation of 1 kW/m². The area of a cell is 150 × 150 mm². If the efficiency of a cell is 15%, then the angle of incidence of radiation made with normal to the solar cell is

- 53.65 deg
- 36.34 deg
- 42.28 deg
- 47.72 deg

No, the answer is incorrect.
Score: 0
Accepted Answers: 53.65 deg

2) The sensitivity of the solar cell to the spectral irradiance of sun light is maximum at

- wavelengths less than 400nm
- wavelengths between 400nm and 700nm
- wavelength between 700nm and 2000nm
- wavelength between 2000nm and 5000nm

No, the answer is incorrect.
Score: 0
Accepted Answers:
4) At a given point on earth located on the 30 deg. latitude line, if the solar declination is −20 deg and the hour angle is 45 deg, then the zenith angle is:

- 44.85 deg
- 66.15 deg
- 23.85 deg
- 45.5 deg

No, the answer is incorrect. Score: 0
Accepted Answers: 66.15 deg

5) On what day approximately the sun will be overhead (noon) at a place located on the latitude 8.57 deg

- March 12
- April 12
- May 12
- June 12

No, the answer is incorrect. Score: 0
Accepted Answers: April 12

6) On which day zenith angle will be equal to latitude

- September 22
- March 21
- Both a and b
- June 21

No, the answer is incorrect. Score: 0
Accepted Answers: Both a and b

7) The extra terrestrial insolation on March 27, 1989 is

- 1.3747
- 1.3341

Score: 0
Accepted Answers: 1.37 kW/m²
8) At sunset and sunrise, the zenith angle is

- 0 deg
- 90 deg
- 180 deg
- 45 deg

No, the answer is incorrect.
Score: 0
Accepted Answers:
1.3747

9) If the solar declination is 23.5 deg and latitude angle is 45 deg, then the sunrise hour angle is

- 45 deg
- -45 deg
- 90 deg
- 115 deg

No, the answer is incorrect.
Score: 0
Accepted Answers:
90 deg

10) The length of the day will be approximately 12 hours on

- Equator
- When the angle of declination is zero
- When the angle of declination is +/- 23.5 deg
- Both a and b

No, the answer is incorrect.
Score: 0
Accepted Answers:
Both a and b