Assignment-04

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Due on 2021-02-17, 23:59 IST.

1) Find out the angle of incidence (in degrees) of solar radiation for a tilted plane (tilt angle = 30°) while the zenith angle, solar azimuth angle and surface azimuth angle are 20°, 35° and 10°.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 13.5, 15

2) Which of the following statement(s) is/are correct for earth as a sphere?

- Both hour angle and declination angle are central angles
- Hour angle is a central angle and declination angle is a surface angle
- Hour angle is a surface angle and declination angle is a central angle
- Both hour angle and declination angle are surface angles

No, the answer is incorrect.
Score: 0
Accepted Answers:
Hour angle is a surface angle and declination angle is a central angle

3) Find out solar altitude angle (in degrees) for Delhi (28.7 °N, 77 °E) when all of the declination, solar azimuth and hour angles are 15° each.

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 14.5, 15.5

4) Mark the correct statement(s).

- Hour angle is positive in solar morning and so is solar azimuth angle
- Hour angle is negative in solar morning and so is solar azimuth angle
- Hour angle is negative in solar morning while solar azimuth angle is positive
- Hour angle is positive in solar morning while solar azimuth angle is negative

No, the answer is incorrect.
Score: 0
Accepted Answers:
Hour angle is negative in solar morning and so is solar azimuth angle

5) A solar collector site (at a location of latitude = 60 °) is 15 m to the south of a building of height 50 m. At 1 pm solar time on 27th December, will the collector site be shaded by the building?

- Yes
- No

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

6) Which one(s) is/are correct?

- Surface azimuth angle is an angle on the horizontal plane and solar altitude angle is an angle on the vertical plane
- Surface azimuth angle is an angle on the vertical plane and solar altitude angle is an angle on the horizontal plane
- Both surface azimuth angle and solar altitude angle are angles on the horizontal plane
- Both surface azimuth angle and solar altitude angle are angles on the vertical plane

No, the answer is incorrect.
Score: 0
Accepted Answers:
Surface azimuth angle is an angle on the horizontal plane and solar altitude angle is an angle on the vertical plane.