Assignment-09

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2021-03-24, 23:59 IST.

1) Compound parabolic collectors are used for
   - Low concentration ratio and minimum tracking requirement
   - High concentration ratio and maximum tracking requirement
   - Low concentration ratio and maximum tracking requirement
   - High concentration ratio and minimum tracking requirement

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

2) Find out the acceptance angle (in degrees) for a conventional two dimensional non-truncated compound parabolic collector of concentration ratio 4.5.

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   (Type: Range) 25.526

3) Find the height to aperture ratio for a conventional two dimensional non-truncated compound parabolic collector having an acceptance half angle of 16 °.

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   (Type: Range) 2, 1, 2.35

4) Paraboloid dish collector works with
   - Fixed position without any tracking
   - Single axis tracking in mode II only
   - Single axis tracking in mode III only
   - Two axes tracking only

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Two axes tracking only

5) Find out the minimum radius (in m) of the receiver tube of a parabolic trough collector for complete interception. Given: rim angle = 70 °; focal length = 2 m. Assume solar half angle on the surface of the earth = 0.267 °.

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   (Type: Range) 13.7, 14.1

6) Find the heat removal factor of a parabolic trough collector carrying water as the working fluid (Cp = 4.2 kJ/kgK) at a rate of 12 kg/hr. Given: Collector efficiency factor = 0.9; Receiver tube diameter = 3 cm; Overall loss coefficient = 12 W/m²K; Length of the trough = 10 m.

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   (Type: Range) 635, 644