

Roll No.

24486

B. Tech. (ME) 7th Semester (Re-appear)

Examination – October, 2020

SOLAR ENERGY ENGINEERING

Paper : ME-431-F

Time : 1.45 Hours] [Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any **three** questions. All questions carry equal marks.

1. (i) Define solar system.
- (ii) Define derived solar angle.
- (iii) Define selective coatings.
- (iv) Define solar cookers.
- (v) Define solar Pumps.
- (vi) Define solar lighting systems.

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- (vii) Define Global Warming.
 - (viii) Define photovoltaics.
 - (ix) Define solar lighting systems.
 - (x) Define satellite solar power systems.
2. Explain steady state heat transmission.
 3. Explain periodic heat transfer through walls and roofs.
 4. Explain the following :
 - (i) Heliostats
 - (ii) Selective coatings
 5. Explain the following :
 - (i) Solar bonds
 - (ii) Thermal storage
 6. Explain passive cooling systems in details.
 7. Explain cooling applications of the solar systems.
 8. Explain remedial measures by International Bodies.
 9. Explain the following :
 - (i) Satellite solar power systems
 - (ii) Ozone layer depletion
