

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.

24486-960-(P-2)(Q-9)(20)

P. T. O.

- (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
- \_\_\_\_\_