GITAM (Deemed to be University)
GST/GSS/GSB/GSHSS Degree Examination
V Semester
MECH2201 : SOLAR ENERGY

Time: 2 Hours   **Max. Marks: 30**

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Instruction: All parts of the unit must be answered in one place only.

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Section - A

1.   Answer all questions   **(5x1=05)**

a.   Why do use pyranometer and its uses?

b.   What do understand by photovoltaic conversion?

c.   Why are solar collectors used?

d.   What is one factor to consider when designing a PV system?

e.   What is solar calculation?

Section - B

Answer the following   **(5x5=25)**

UNIT - I

2.   Describe the three modes of heat transfer using examples.

OR

3.   Describe Nature of Solar Energy Solar Energy & Environment.

UNIT - II

4.   Explain any three types of Silicon PV cells.

OR

5.   What is a PN junction? What are its characteristics?

UNIT - III

6.   What are the benefits of solar thermal energy?

OR

7.   Explain the working principle of solar dryer.

UNIT - IV

8.   Explain any five applications of PV systems.

OR

9.   Explain PV system based solar vehicles with some examples.

UNIT - V

10. What is a carbon credit, and how is it related to solar energy systems?

OR

11. Why is the time value of money important when analyzing the cost of a solar energy project?