

Enroll No

Q.P. Code
UT 3047

**Unit Test -I (2025-26)**

S.Y. B. Tech.-Electrical Engineering

**Course Code: EEMD201**

**Course Name: Electrical Power Generation**

Day & Date: Wednesday, 13.08.2025

Time: 03:45 pm to 04:45 pm.

Max Marks- 25

- Instructions:**
- 1) All questions are compulsory.
  - 2) Figures in rounded ( ) brackets within the question, indicate the scheme of marking for respective part of the question, whereas, figures in the first right column indicate total marks for that whole question.
  - 3) CO is the index number of the Course Outcome statement.
  - 4) The Bloom's taxonomy level (BL) for 1,2,3,4,5 and 6 is remember, understand, apply, analyze, evaluate and create respectively.
  - 5) Assume suitable data if necessary.
  - 6) Use of non-programmable calculators is allowed

	Marks	BT Level	COs
<b>Q.1</b> A List the types of solar thermal power plant (02). Explain with neat diagram the 'solar pond power plant (05).	7	2	CO1
B State PV cell, PV array and PV panel (02). Explain working principle and construction of PV Cell (04).	6	2	CO1
<b>OR</b>			
B Explain implementation (03) of 'solar hydrogen energy cycle' for electrical power generation with layout (03).	6	2	CO1
<b>Q.2</b> A Define cut-in speed, cut-off speed and rated speed (03). Draw necessary speed-power curve (02).	5	2	CO2
B List the factors (02) affecting the amount of output power in wind power generation. Derive the relation between output power and wind speed (05).	7	3	CO2

