Eastern Mediterranean University
Department of Mechanical Engineering
Laboratory Handout

COURSE: **SOLAR ENERGY ENGINEERING (MENG 442)**

Semester: 2018-2019 Fall

Name of Experiment: Determining the instant electrical capacity of the PVT

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Submitted by:

Student No:

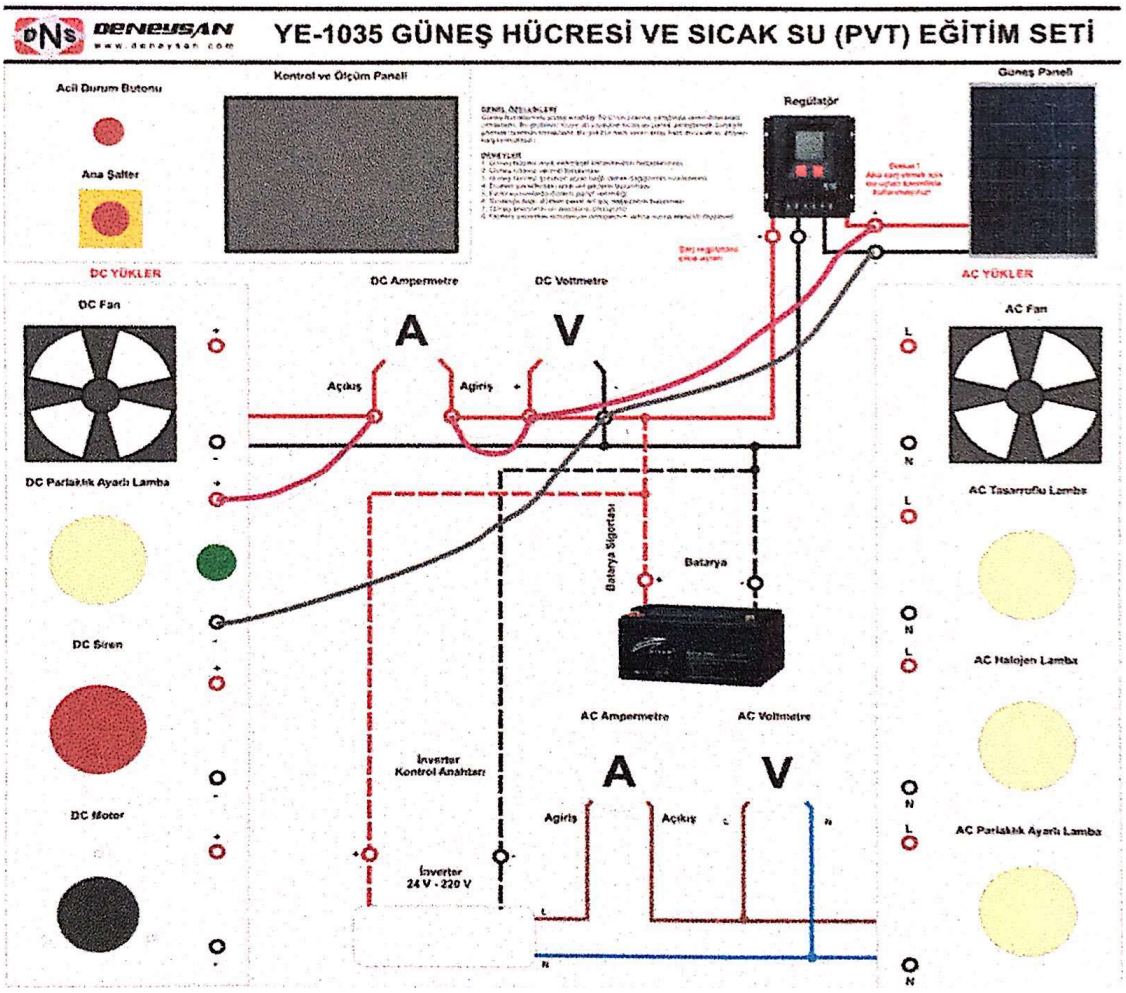
Date of experiment:

Date of submission:

EVALUATION

Activity During Experiment & Procedure	**30 %**	
Data , Results & Graphs	**35 %**	
Discussion, Conclusion & Answer to Questions	**30 %**	
Neat and tidy report writing	**5 %**	
Overall Mark		

- OBJECTIVES: the objective of this experiment is to calculate the electrical capacity of the PVT system by measuring the voltage and values.
- NECESSARY EQUIPMENTS
    - Connection cables
- OPERATING INSTRUCTIONS AND PROCEDURE:
    1. Adjust the tilt angle so that the sun light comes with a 90° angle.
    2. Connect the cables as shown in the figure below.
    3. Measure the current and voltage of the PVT and record them to the table given below.
    4. Calculate the generated power using the necessary equations.



NOTE: This schematic is given as an example. Other loads can also be used if wanted

- REPORT CONTENT: Experiment's number, name and objectives, determining the power using the measured values, drawing and angle-power curve.

CALCULATIONS:

Power: P=V*I (W)

MEASUREMENT NO	1	2	3
Voltage V, (V)			
Current, I_c,(A)			
Power, P, (W)			