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**Question Paper Code: 58364**

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

One credit

Electrical and Electronics Engineering

15UEE864- SOLAR PHOTOVOLTAIC TECHNOLOGY

(Regulation 2015)

Duration: 1.30 hours

Maximum: 50 Marks

Answer ALL Questions

PART – A (5 x 2= 10 Marks)

1. Explain the term “photovoltaic effect”. CO1- R
2. Define insolation or solar irradiance . CO1 -R
3. Compare primary and secondary cell. CO2 -U
4. Why battery is needed in a standalone PV system? CO2-U
5. Draw the schematic diagram of grid connected PV system. CO3-U

PART – B (2 x 20= 40 Marks)

6. (a) Analyze the term ‘balance of system’? Give the block diagram of Grid connected PV system . Briefly discuss any one PV scheme. CO1- Ana (20)  
Or  
(b) Elucidate the structure and working of solar cells with neat diagram CO1- Ana (20)
7. (a) Classify the types of converters employed for PV standalone systems. Why DC-DC converters required in standalone PV systems? CO3 -U (20)  
Or  
(b) Design a Solar PV Stand Alone System for Pumping Application for a Load of 25 KW CO3- U (20)

