

Reg. No. :

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Question Paper Code: U8364

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2023

One credit

Electrical and Electronics Engineering

21UEE864 - SOLAR PHOTO VOLTAIC

(Regulations 2021)

Duration: 1.30 Hours

Maximum: 50 Marks

Answer ALL Questions

PART A - (5 x 2 = 10 Marks)

1. Explain the Term “Photovoltaic Effect”. CO1 - U
2. Give a Block Diagram of a PV System which is designed to supply power to the load during non – sunshine hours. CO2- U
3. What is meant by BOS in grid connected PV system? CO3- U
4. What are the conditions for synchronizing PV inverters with the grid? CO3- U
5. What are hot spots in a PV Module ? CO1- U

PART – B (2 x 20= 40 Marks)

6. (a) Elucidate the structure and working of solar cells with neat diagram. CO1 - U (20)
OR
(b) Explain the types, properties & behavior of solar cells. CO1 - U (20)
7. (a) Give the block diagram of Stand alone PV system . Briefly discuss any one PV scheme. CO2 - U (20)
OR
(b) Analyze the DC and AC applications of standalone PV systems. CO2 - U (20)

