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**Question Paper Code: 59373**

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

Open Elective

Civil Engineering

15UEE973 - SOLAR POWER PLANTS

(Common to CSE,ECE,EIE,Mechanical,IT,Chemical)

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

PART –A (5 x 20= 100 Marks)

1. (a) Draw a neat schematic diagram of a hydro-electric plant and explain the functions of various components. CO1 -U (20)  
Or  
(b) Draw the schematic diagram of a nuclear power station and discuss its operation. CO1- U (20)
2. (a) Discuss about vapour and organic cycles with neat sketch. CO2 -Ana (20)  
Or  
(b) Compare the different types of Reheat cycle with neat diagram. CO2 -Ana (20)
3. (a) Explain the basic principles of solar thermal power plants with neat block diagram CO3- U (20)  
Or  
(b) Explain the operation of solar flat plate collector with neat diagram CO3 -U (20)
4. (a) Discuss in detail about the operation of standalone photovoltaic system. CO4 -Ana (20)  
Or  
(b) Discuss in detail about the operation of grid-connected photovoltaic system. CO4 -Ana (20)

5. (a) Discuss in detail about the Methods to Calculate the Plant CO5 -U (20)  
Economy
- Or
- (b) Classify the types of fixing power tariff. CO5 -U (20)