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Reg. No. :

B.E./B.Tech. DEGREE EXAMINATION, DEC 2021

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)

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