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Question Paper Code: U9372

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2024

Open Elective

Electrical And Electronics Engineering

21UEE972-RENEWABLE ENERGY TECHNOLOGY

(Common To All Branches)

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer All Questions

PART – A (5 x 20= 100 Marks)

1. (a) Explain the Environmental aspects of Energy Conservation with a neat sketch. CO1-U (16)
Or
(b) Explain about the Greenhouse effect and various pollutants and their harmful effects CO1-U (16)
2. (a) Explain about Solar pond Electric power plant with a neat diagram CO1-U (16)
Or
(b) Explain about standalone Solar PV system. CO1-U (16)
3. (a) Explain about the Vertical Axis wind turbine (VAWT) CO1 U (16)
Or
(b) Explain about fixed speed driver scheme in wind energy system CO1-U (16)
4. (a) (i) Classify the biogas gasifier. CO3-Ana (16)
(ii) Analyze the down draught and Up draught biogas gasifier with a neat sketch.
Or
(b) Analyze the function of floating biogas plant with a neat sketch and also mention its merits and demerits. CO3-Ana (16)

5. (a) Demonstrate the operation methods of double basin arrangement of tidal energy. CO2-App (16)

Or

- (b) Apply the operation of Phosphoric Acid Fuel Cell (PAFC) to draw its performance with neat sketch. CO2-App (16)