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Code No: 138GW

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, September - 2020

RENEWABLE ENERGY SOURCES

(Common to EEE, CSE)

Time: 2 Hours

Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks

- 1.a) Discuss the global climate changes in India.
b) Explain the global and Indian energy scenario. [8+7]

- 2.a) Describe the CO₂ reduction potential of renewable energy.
b) Give the importance of renewable and non-renewable energy sources. [8+7]

3. Explain the procedure to estimate the average solar radiation. [15]

4. Describe thermal energy storage systems and their applications. [15]

- 5.a) Discuss the wind energy potential and potential measurement in India
b) Explain the factors influence for site selection of wind power generation. [8+7]

- 6.a) Describe the wind turbines characteristics and applications.
b) Explain the safety and environmental aspects for wind generation plants. [7+8]

- 7.a) What are the different factors which affect the size of the bio gas plants?
b) Describe the biomass energy programme in India. [7+8]

- 8.a) Explain the principle of tidal energy production and components of tidal power plant.
b) Discuss the typical OTEC plant salient features. [7+8]

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