

Code No: 136FQ

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, November/December - 2020

NON-CONVENTIONAL ENERGY SOURCES

(Common to CE, EEE, ME, ECE, ETM, CEE)

Time: 2 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

1. Compare and contrast the various non-conventional energy sources based on the energy sources. [15]
2. State the importance of non-conventional energy sources in the context of global warming. [15]
3. Describe solar pond for solar energy collection and storage. [15]
4. What do you mean by concentrating collector? Discuss paraboloidal and heliostat collector configuration. [15]
5. Describe the concepts of lift and drag forces pertaining to wind turbine. [15]
- 6.a) Explain the mechanism of production of local winds.
b) Describe with a neat sketch the working of wind energy system with main components. [7+8]
7. Describe the utilization for electric generation and direct heating of geothermal resources. [15]
8. Explain with neat sketches the various methods of Tidal power generation. [15]

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