

R09

Code No: 58020

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech IV Year II Semester Examinations, May - 2015****RENEWABLE ENERGY SOURCES****(Common to ME, AME)****Time: 3 Hours****Max. Marks: 75****Answer any Five Questions
All Questions Carry Equal Marks**

- 1.a) Discuss briefly the instruments for measuring solar radiation.
b) What is solar constant? Explain briefly. [7+8]
- 2.a) List the advantages, disadvantages and applications of solar thermal energy.
b) What do you mean by performance of a flat plate collector? Explain briefly. [8+7]
- 3.a) Describe briefly a basic type of solar pond.
b) What are the limitations of using solar water heating systems? [7+8]
- 4.a) Discuss environment impacts of wind energy.
b) Explain with a neat sketch the construction and working of wind electric generating plant. [8+7]
- 5.a) Why are biogas plants not much successful in India?
b) Which factors should be considered while selecting a site for biogas plant? [7+8]
- 6.a) Describe with a neat sketch the Hot spring structure.
b) Explain briefly the various parts of the earth's interior. [8+7]
- 7.a) Write a short notes on Wave power development.
b) Explain the principle of Ocean Thermal Energy Conversion? [8+7]
- 8.a) How are MHD systems classified?
b) Describe closed cycle MHD system. [8+7]

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