

Roll No.

24427

**B. Tech. 7th Sem. (EE)
Examination – May, 2015**

**RENEWABLE ENERGY RESOURCES AND
TECHNOLOGY**

Paper : HUM-459-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Section – A is *compulsory*. Attempt *four* more questions from remaining *four* Sections (B, C, D & E) by selecting at least *one* question from each Section.

SECTION – A

1. (i) Define & Explain the term co-generation. 5
- (ii) What is Green House Effect ? 5

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(iii) What is the prospect of ocean energy in India ?

5

(iv) Indian resources of gas hydrates shall meet the future energy need. Explain.

5

SECTION - B

2. Briefly explain the different form of energy and also discuss the power scenario in India. 20
3. Discuss the atmospheric threat posed to environment from thermal power plants and nuclear power plants. 20

SECTION - C

4. Discuss various solar thermal energy storage system in detail. 20
5. Discuss the control system that can be used to monitor a large wind farm interconnected to grid. 20

SECTION - D

6. What do you understand by Geothermal energy ?
Discuss the various sources of Geothermal energy. 20
7. What is biomass ? Discuss the factors affecting the
production of biogas. 20

SECTION - E

8. Distinguish between battery and fuel cell. Also explain
the characteristics of fuel cell. 20
9. What do you mean by MHD system ? Explain the
basic principle and working of MHD system. 20