

8. List down the wind economics determining factors. State the various applications of wind energy. Mention the various hybrid systems used in wind power generation.

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Roll No.

CC-262

Master of Architecture

EXAMINATION, May 2017

(Third Semester)

(Re-appear Only)

(SUSTAINABLE ARCHITECTURE)

MARC-705

Alternative Energy Fundamentals

Time : 3 Hours]

[Maximum Marks : 75

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

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Write about the availability energy consumption pattern of industry and agricultural and grown rate in India.
(b) Explain, why it is necessary to develop non-conventional method of generating electrical energy ?
2. (a) Discuss energy requirement of rural consumers and state the possible alternative source of energy to meet the demand.
(b) What are the prospects of renewable energy sources in India ?

Unit II

3. Write a note on total solar energy received in India. Explain three types of solar energy collectors. Mention any *two* applications of solar energy.

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4. (a) Define Vertical Axis Wind Turbine (VAWT). What are the factors to be considered while selecting the site for wind mills ?
(b) How the wind mills are classified ? What are the advantages of wind power ?

Unit III

5. What is geothermal energy ? How can geothermal energy are utilized for electric power Generation ?
6. (a) Discuss the various sources of energy available with oceans.
(b) Explain the methods for the utilization of tidal energy in single basin arrangement.

Unit IV

7. Define Pyrolysis. What is the scope of biomass energy ? What are the different types of biomass waste ?

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P.T.O.