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SUBJECT CODE NO:- H-1434
FACULTY OF SCIENCE AND TECHNOLOGY
T.Y.B.Tech.(Electrical) (Sem-V)
Elective-II Renewable Energy Sources
(Revised)

[Time: Two Hours]**[Max.Marks:40]**

N.B

Please check whether you have got the right question paper.

- Question no.1 from section A and Question no 4 from section B is compulsory.
- Solve any one from remaining questions from each section
- Assume suitable data, if required.

Section A

- Q.1 Answer any five of the following: 10
- a) Define Solar collectors.
 - b) Define Solar panels.
 - c) List out the various instruments for measuring solar energy.
 - d) Explain the Solar irradiation
 - e) Explain any energy storage system.
 - f) Draw a solar cooling system and label all parts neatly.
 - g) Draw a solar cell and label all parts neatly.
- Q.2 A) Explain Photovoltaic effect. 05
- B) How solar energy is used for room heating. Explain with neat diagram. 05
- Q.3 A) Explain Horizontal axis wind turbine in detail. 05
- B) Explain how we measure solar energy using pyr heliometer with neat diagram. 05

Section B

- Q.4 Answer any five of the following: 10
- a) Explain the term biogas.
 - b) Draw a neat diagram of biogas plant.
 - c) Explain Fermentation
 - d) What do you mean by Tide & Wave
 - e) Draw a neat diagram of energy generation for geothermal sources.
 - f) List the factors controlling yield of biogas.
 - g) List out the advantages of OTEC system.
- Q.5 A) Explain in detail any one type of biogas plant. 05
- B) Explain pyrolysis process in detail. 05
- Q.6 A) Explain wave energy conversion system. 05
- B) Explain energy generation from geothermal sources. 05