ST. JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

III SEMESTER **AGRICULTURE AND RURAL DEVELOPMENT** Time:3hrs/week

AENG 252P (1) **Renewable Energy and Green Technology** Marks:50

w.e.f AJ 2022-2023  **PRACTICAL SYLLABUS**

**Objectives**

* To know Availability and uses of non - conventional energy in agricultural sector.
* To study about Bio-fuel production from biomass and its application.
* To study about practical approach to biogas production and biogas plants capacity and design calculations.
* To Evaluation of solar pump for agriculture

**Course Outcomes**

**CO1:** Students will understand Importance of biomass, classification of energy production - Principles of combustion, pyrolysis and gasification

**CO2:** Students will understand Classification, types of biogas plants.

**CO3:** Students will understand Types of gasifiers

**CO4:** Students will understand Solar energy

**EXPERIMENTS**

1. Availability and uses of non - conventional energy in agricultural sector.

2. Bio-fuel production from biomass and its application.

3. Practical approach to biogas production and biogas plants capacity and design calculations.

4. Evaluation of solar pump for agriculture.

5. Study of solar drying system.

6. Study of solar distillation and solar pond.

7. Steps adopted for erecting solar fence.

8. Visit to solar wind farm. 15 &16. Visit to solar photovoltaic farm.

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