QUESTION BANK

SUSTAINABLE ENERGY (18EEO301T)

UNIT-02

- 1. What is the principles of wind energy conversion.
- 2. Explain the mechanism of production of local winds
- 3. Write down the common point for site selection of wind energy system.
- **4.** What are the different types of wind turbine? Explain any one with suitable diagram.
- **5.** With a neat diagram, explain how wind energy can be converted into electrical energy.
- **6.** What are the advantages and disadvantages of establishing wind mills?
- **7.** What are the factors that influences the wind blows. How to select the sight to establish wind power plant?
- **8.** Sketch the diagram of a HAWT, and explain the function of its main components.
- **9.** Derive the power generated from the wind in WECS.
- **10.** What are the different types of generators and power converters in WECS?
- **11.** Explain the major application of wind power.
- 12. Comment on the environmental impact of wind energy.

UNIT-03

- 1. What is bio- mass and write few examples of bio mass?
- 2. What is the main advantage and disadvantage of biomass energy?
- **3.** Explain different type of bio fuels?
- **4.** What are bio-mass energy resources and what is energy yield from each of them?
- **5.** What is the origin of biomass energy? What is its global potential?
- **6.** What is bio-gas? What are the different type of biogas plant?
- 7. What are the Advantages and disadvantages of biogas plants.
- **8.** What is Biogas digester? Explain with suitable diagram.
- **9.** With a neat diagram of a bio-gas plant write its construction and working?
- 10. What is the major disadvantage of bio-mass and how can it be overcome?
- 11. What are the factors affecting on the performance of biogas digester?
- 12. Explain photosynthesis with the help of suitable diagram.