

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(EE)EI-I(2018 Batch) (Sem.-1)

RENEWABLE ENERGY SYSTEMS

Subject Code : MTEE-103C-18

Paper ID : [75219]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWELVE marks.
3. Make use of diagrams to explain.

- Q1. i) What is the impact of distributed generation on the power system? How does it affect the power quality?
ii) What do you understand from sources of energy? What is the need of these energy sources? Where are they used? (7,5)
- Q2. Illustrate the construction and working of internal combustion engine. What are the uses of internal combustion engine? (12)
- Q3. What is energy? What are various types of energy? Compare the performance and uses of solar energy, geothermal energy, fuel and biomass energy. (12)
- Q4. What is the function of grid for distribution of power? Explain the development of power electronic interface for the grid system. (12)
- Q5. i) What are transmission systems? How do transmission systems operate? What are their limitations?
ii) Write about photovoltaic solar cell. (9,3)
- Q6. What is the difference between distributed and central station generations? Which is preferred and why? (12)
- Q7. Explain in detail an efficient method for collection and storage of solar energy. How solar energy can be used in agriculture and in industrial processes? (12)
- Q8. What is meant by ocean thermal electric conversion? What are the operation methods of utilization of tidal power generation? Where is this oceanic energy sources used?