

Assignment – I

Date: 15th Jan 2020

Renewable Energy Science and Technology

Last date of submission: 15th Feb 2020

Full Marks- 50

1. Explain the first law of thermodynamics. [5] Does it indicate continuous depletion of energy? [2]
2. Explain the meaning of “Global Energy Crisis” (within 50-100 words). [8]
3. Write down the statement of second law of thermodynamics. [5] What is the significance of second law efficiency of a heat engine? [5]
4. A heat engine operates between two reservoirs of temperatures 500°C and 30°C. What is the Carnot efficiency? [5]
5. How do you define Exergy? [5] Why the concept of exergy is very important in the context of energy science? [5]
6. Explain the basic concept of Rankine cycle with diagram. [10]