

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY: PUTTUR

(AUTONOMOUS)

M.Tech II Year I Semester Regular Examinations March-2022

DESIGN OF SOLAR AND WIND SYSTEMS

(Thermal Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 Explain in detail about conventional sources of energy. L2 12M
- OR
- 2 What are the alternate sources of energy? Explain any three in detail. L1 12M

UNIT-II

- 3 Discuss the different types of Nuclear energy technologies? L6 12M
- OR
- 4 Summarize notes on Nuclear power plants in India L2 12M

UNIT-III

- 5 Elaborate the factors of a site selection for installing wind turbines. L6 12M
- OR
- 6 Classify wind energy conversion systems and explain. L2 12M

UNIT-IV

- 7 a How can Hydrogen be a renewable source of energy? L1 6M
b Identify the applications of hydrogen. L3 6M
- OR
- 8 Elaborate the production process of hydrogen by direct electrolysis of water. L6 12M

UNIT-V

- 9 a Summarize notes on hydrogen fuel cell. L2 6M
b What is Thermo electric effect? Write the principle of thermo electric generator. L1 6M
- OR
- 10 Explain about Magneto Hydrodynamic Generator L2 12M

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