

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA**Lesson plan****Semester: 7th****Subject: Energy Conservation and Renewable Sources of Energy**

Lecture	Module	Topic
1	01	Introduction
2	01	Energy sources and their availability
3	01	Solar energy fundamentals and application
4	01	Introduction & Utilization of Geothermal energy
5	01	Geothermal energy resources, geothermal gradient
6	01	Different types of Geothermal Electric power plant
7	01	Geothermal Electric power plant operations
8	02	Fundamentals and application of Wind energy
9	02	Basic principles of Wind Energy Conversion
10	02	Wind Energy conversion system
11	02	Performance of wind machines
12	02	Electric generation for wind
13	02	Introduction to Biomass Energy Resources
14	02	Biomass Conversion Process
15	02	Biogas from plant wastes
16	02	communities bio-gas plants
17	03	Biochemical conversion
18	03	Fermentation
19	03	Liquid fuels for biomass
20	03	Urban solid waste
21	03	waste incineration process
22	03	Environmental consideration
23	03	Fluidized bed combustion boilers for burning solid waste and fossil fuels
24	03	Energy from the oceans
25	03	Ocean Energy conversion Technologies
26	03	Types&operation of Ocean Thermal Electric Power Generation system
27	03	Tidal power plant
28	03	Types of hydroelectric plants and energy conversion scheme
29	03	Impulse turbine and Reaction turbine
30	03	Classification of Hydro-Energy plants
31	04	Principle of energy conservation and Energy Audit
32	04	Energy conservation Technologies
33	04	Co-generation
34	04	waste heat utilization
35	04	Heat recuperates
36	04	Heat regenerators
37	04	Heat pipes
38	04	Heat pumps
39	04	Energy storage
40	04	Doubt clearance

Signature of the Faculty Member:

Date:

Counter Signature of H.O.D