

LESSON PLAN-2022
SWAMI VIVEKANANDA SCHOOL OF ENGINEERING & TECHNOLOGY, BBSR

DISCIPLINE- MECHANICAL	SEMESTER- 3RD	NAME OF THE FACULTY: Mr.Aurobindo Nayak
SUBJECT:-Thermal Engineering.	NO. OF CLASS ALLOTTED/ PER WEEK-5	SEM. From date:15.9.2022 to 22.12.2022 No. of weeks:15TH
WEEK	CLASS DAY	Theory Topic
1ST	15.09.2022	Thermodynamic concept and Terminology.
	17.09.2022	Thermodynamics System(Closed,open,isolated)
2ND	19.09.2022	Thermodynamic properties of a system(pressure,volume,temperature,entrop
	21.09.2022	enthalpy,internal energy and units of measurement)
	23.09.2022	intensive and extensive properties)
3RD	26.09.2022	Thermodynamic Equilibrium.
	28.09.2022	Quasi-static process.
	30.09.2022	Conceptual explanation of energy and its sources.
4TH	6.10.2022	Work, heat, and comparison between the two.
	7.10.2022	Mechanical equivalent of heat.
5TH	11.10.2022	Work transfer,Displacement work.
	13.10.2022	DO
	15.10.2022	DO.
6TH	17.10.2022	Laws of Thermodynamics.
	19.10.2022	State and explain First law of thermodynamics.
	21.10.2022	Limitation of First of law of thermodynamics.
7TH	26.10.2022	applicaion to turbine and compressor
	29.10.2022	Second law of thermodynamics.(Claucius and kelvin plank statement)
8TH	1.11.2022	Application of second law in heat engine ,heat pump,refrigerator.
	3.11.2022	Determination of efficiencies and COP(Solve simple numerical)
	5.11.2022	DO
9TH	7.11.2022	DO
	11.11.2022	Properties process of perfect gas.
10TH	15.11.2022	Laws of perfect gas.
	18.11.2022	Boyle's Law,Charle's law,Avogadro's law,Dalton's law of partial pressure.
11TH	21.11.2022	Gay Lussac law,General gas equation,Characteristic gas constant,Universal ga
	23.11.2022	Explain specific heat of gas.(Cp and Cv).
	25.11.2022	Relation between Cp and Cv.
12TH	29.11.2022	Enthalpy of a gas.
	1.12.2022	Workdone during a non-flow process.
	3.12.2022	Isothermal,Isobaric,Isentropic,and polytropic process.
13TH	5.12.2022	Solve simple problems on above.
	7.12.2022	Free expansion and trotting processs.
	9.12.2022	DO
	12.12.2022	DO
	14.12.2022	Internal Combution Engine.
	15.12.2022	Explain and classify I.C Engine.

14TH	17.12.2022	Terminology of I.C Engine such as bore,dead centers,stroke volume,piston sp
	19.12.2022	Explain the working principle of 2-stroke and 4-stroke engine C.I and S.I engi
	20.12.2022	Differentiate between 2-stroke and 4-stroke engine C.I and S.I
15TH	21.12.2022	DO.
	22.12.2022	DO
HOD SIGN. PRINCIPAL SIGN.		