



NILASAIL INSTITUTE OF SCIENCE & TECHNOLOGY
SERGARH-756060, BALASORE (ODISHA)
(Approved by AICTE & affiliated to SCTE & VT, Odisha)



LESSON PLAN

SUBJECT: Th-4 (ELEMENT OF MECHANICAL ENGINEERING)

CHAPTER WISE DISTRIBUTION OF PERIODS

Sl. No.	Name of the chapter as per the Syllabus	No. of Periods as per the Syllabus
1	THERMODYNAMICS	6
2	PROPERTIES OF STEAM	5
3	BOILERS	10
4	STEAM ENGINES	10
5	STEAM TURBINES	6
6	CONDENSER	4
7	I.C. ENGINE	4
8	HYDROSTATICS	5
9	HYDROKINETICS	5
10	HYDRAULIC DEVICES AND PNEUMATICS	5
11	TOTAL PERIOD	60

Discipline :EE/EEE	Semester: 3rd	Name of the Teaching Faculty: Er. BISHNU CHARAN JENA
	Class Day	Theory/Practical Topics
Week	Class Day	Theory/Practical Topics
1 st	1 st	<i>THERMODYNAICS:</i>
	2 nd	State Unit of Heat and work, 1 st law of thermodynamics.
	3 rd	State Unit of Heat and work, 1 st law of thermodynamics.
	4 th	State Laws of perfect gases
	5 th	Determine relationship of specific heat of gases at constant volume and constant pressure
2 nd	1 st	PROPERTIES OF STEAM
	2 nd	PROPERTIES OF STEAM:
	3 rd	Use steam table for solution of simple problem
	4 th	Explain total heat of wet, dry and super heated steam
	5 th	Explain total heat of wet, dry and super heated steam
3 rd	1 st	BOILERS
	2 nd	<i>BOILERS</i>
	3 rd	State types of Boilers
	4 th	Describe Cochran
	5 th	Babcock Wilcox boiler
4 th	1 st	Describe Mountings and accessories
	2 nd	Describe Mountings and accessories
	3 rd	CLASSTEST
	4 th	STEAMENGINES:
	5 th	STEAMENGINES:
5 th	1 st	Explain the principle of Simple steam engine
	2 nd	Explain the principle of Simple steam engine
	3 rd	<i>Draw Indicator diagram</i>
	4 th	<i>Calculate Mean effective pressure</i>
	5 th	IHP and BHP and mechanical efficiency.
6 th	1 st	Solve Simple problem.
	2 nd	Solve Simple problem.
	3 rd	STEAMTURBINES
	4 th	STEAMTURBINES
7 th	1 st	State Types
	2 nd	State Types
	3 rd	Differentiate between impulse and reaction Turbine
	4 th	Differentiate between impulse and reaction Turbine
	5 th	<i>CLASSTEST</i>
8 th	1 st	CONDENSER
	2 nd	1Explainthefunctionof condenser
	3 rd	1Explainthefunctionof condenser
	4 th	State their types
9 th	1 st	State their types

	2 nd	I.C.ENGINE
	3 rd	I.C.ENGINE
	4 th	Explain working of twostroke and 4stroke petrol and Dieselenines.
10 th	1 st	Explain working of two stroke and 4stroke petrol and Diesel engines.
	2 nd	<i>Differentiate between them</i>
	3 rd	Differentiate between them
	4 th	HYDROSTATICS
	5 th	HYDROSTATICS
11 th	1 st	Describe properties of fluid
	2 nd	Describe properties of fluid
	3 rd	FLUID
	4 th	REVISION
	5 th	Determine pressure at a point, pressure measuring Instruments
12 th	1 st	Determine pressure at a point, pressure measuring Instruments
	2 nd	HYDROKINETICS:
	3 rd	HYDROKINETICS:
	4 th	<i>Deduce equation of continuity of flow</i>
13 th	1 st	Deduce equation of continuity of flow
	2 nd	Explain energy of flowing liquid
	3 rd	Explain energy of flowing liquid
	4 th	State and explain Bernoulli's theorem
14 th	1 st	State and explain Bernoulli's theorem
	2 nd	CLASSTEST
	3 rd	HYDRAULIC DEVICES AND PNEUMATICS:
	4 th	HYDRAULIC DEVICES AND PNEUMATICS:
	5 th	Intensifier
15 th	1 st	Intensifier
	2 nd	Hydraulic lift
	3 rd	Accumulator
	4 th	Accumulator
	5 th	Hydraulic ram

