

**ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT,
TEKKALI
DEPT.OF MECHANICAL ENGINEERING
LESSION PLAN**

Subject Name & code: **THERMAL ENGINEERING-I**

Year: **II B. Tech.**

Branch / Semester: **ME-B_II-Semester**

A.Y: **2015 – 16**

Faculty Name: **K. MOHAN LAXMI**

PERIOD	DATE	TOPIC	UNIT NO.	TEACHING METHODOLOGY
4	23-12-2015	actual cycles & their analysis	1	CR
4	23-12-2015	introduction	1	CR
5	24-12-2015	comparison of air standard & actual cycles	1	CR
5	24-12-2015	time loss factor, heat loss factor	1	CR
1,2	25-12-2015	exhaust blowdown loss due to gas exchange process	1	CR
1,2	25-12-2015	volumetric efficiency	1	CR
1,2	25-12-2015	loss due to rubbing friction	1	CR
4	30-12-2015	actual & fuel air cycles of CI engines	1	CR
5	31-12-2015	IC engines classification	1	CR
5	31-12-2015	working principles	1	PPT
4	06-01-2016	value and post timing diagram	1	CR
5	07-01-2016	air standard, air fuel, actual cycles	1	CR
1,2	08-01-2016	engine systems full carburetor	1	PPT
4	20-01-2016	fuel injection system	1	PPT
5	21-01-2016	ignition cooling & lubrication	1	PPT
1,2	22-01-2016	principle of wankel engine	1	PPT
1,2	22-01-2016	combustion in SI engine	1	CR
1,2	29-01-2016	normal combustion and abnormal combustion	2	CR

1,2	29-01-2016	importance of flame speed & effect of engine variables	2	CR
1,2	29-01-2016	types of abnormal combustion	2	CR
4	03-02-2016	preignition & knocking	2	CR
4	03-02-2016	fuel requirements & fuel rating	2	CR
5	04-02-2016	anti-knock additives	2	CR
1,2	05-02-2016	combustion chamber requirements, types	2	CR
4	10-02-2016	combustion CI engines	3	CR
5	11-02-2016	four stages of combustion	3	CR
1,2	12-02-2016	delay period and its importance	3	CR
1,2	12-02-2016	effect of engine variables	3	CR
1,2	17-02-2016	diesel knock- need for air movement	3	CR
1,2	17-02-2016	suction, compression	3	CR
5	18-02-2016	& combustion induced turbulence	3	CR
1,2	19-02-2016	open & divided combustion chambers & nozzles	3	CR
4	24-02-2016	fuel requirements & fuel rating	3	CR
5	25-02-2016	testing and performance	4	CR
5	25-02-2016	parameters of performance	4	CR
1,2	26-02-2016	measurement of cylinder pressure	4	CR
1,2	26-02-2016	fuel combustion	4	CR
4	02-03-2016	air intake	4	CR
4	02-03-2016	exhaust gas composition	4	CR
4	09-03-2016	brake power	4	CR
5	10-03-2016	determination of frictional losses	4	CR
5	10-03-2016	indicated power	4	CR
1,2	11-03-2016	performance test heat balance sheet	4	CR

1,2	11-03-2016	heat balance sheet	5	CR
4	16-03-2016	compressors	5	PPT
4	16-03-2016	classification	5	CR
4	16-03-2016	positive displacement	5	CR
4	16-03-2016	rotodynamic machinery	5	CR
5	17-03-2016	reciprocating compressors	5	CR
5	17-03-2016	principle of operation	5	CR
5	17-03-2016	work required	5	CR
1,2	18-03-2016	isothermal efficiency	5	CR
1,2	18-03-2016	volumetric efficiency	5	CR
1,2	18-03-2016	effect of clearance	5	CR
1,2	18-03-2016	stage compression	5	CR
1,2	18-03-2016	undercooling saving of work	5	CR
1,2	18-03-2016	minimum work of compression for	5	CR
1,2	18-03-2016	stage compression	5	CR
5	24-03-2016	rotary compressors positive displacement type	5	CR
5	24-03-2016	roots blower vane screw compressor	5	CR
5	24-03-2016	lysholm compressor	5	CR
5	24-03-2016	mechanical details and principles	5	CR
4	30-03-2016	of working, efficiency consideration	5	CR
4	30-03-2016	axial flow compressors	5	CR
5	31-03-2016	mechanical details and principles	5	CR
5	31-03-2016	of operation	5	CR
5	31-03-2016	velocity triangles	5	CR
1,2	01-04-2016	& energy transfer per stage	5	CR
1,2	01-04-2016	degree of reaction	5	CR

4	06-04-2016	work done factor	5	CR
5	07-04-2016	isentropic efficiency	5	CR
1,2	08-04-2016	pressure rise calculations	5	CR
1,2	08-04-2016	polytrophic efficiency	5	CR