



Atal Bihari Vajpayee Govt Institute of Engineering & Technology

DEPARTMENT OF MECHANICAL ENGINEERING

LESSON PLAN

Academic Year	JANUARY 2026 -JUNE 2026
Scheme	N-2022
Semester	FOURTH
Course Code	MEPC210
Course Name	THERMAL ENGINEERING LAB-II
Course Type	PROGRAM CORE COURSE (PC)
L-T-P	0-0-2
Name of Faculty	NIKHIL SHARMA
Semester Start & End Dates	27-01-2026 TO 27-05-2026

STUDY AND EVALUATION SCHEME

Sr. No.	Name of the Subject	Th.	Pr.	Internal Assessment			External Assessment					Total Marks	Credit
				Th.	Pr.	Total	Th.	Hrs.	Pr.	Hrs.	Total		
1	THERMAL ENGINEERING-II	NA	02	NA	40	40	NA	NA	60	03	60	100	01

Reference Books:

	Name of Book	Author Name	Publication
Prescribed Books	Thermal Engineering	R.K. Rajput	Laxmi Publication NewDelhi
	A Course in Thermal Engineering	S. Domkundwar&C.P.Kothand araman	Dhanpat Rai & Publication, New Delhi
	Heat Engineering	V.P.Vasandani&D.S. Kumar	Metropolitan Book Co. Pvt. Ltd,NewDelhi.

On the successful completion of this course, students will be able to:

CO1	Evaluate the performance characteristics of single cylinder diesel/petrol engine at different loads and draw the heat balance sheet
CO2	Find the indicated power of individual cylinders of an engine by using morse test
CO3	Evaluate the performance characteristics of air compressor
CO4	Evaluate the coefficient of performance of refrigerator
CO5	Find the thermal conductivity of material

Practical Performing Plan

No. of Lab. Classes Planed	Practical to be perform/conduct	Proposed date (as per time table)		Actual Date		Remarks
		G-I	G-II	G-I	G-II	
1	Study of Cochran, Babcock and Wilcox boiler with model	28.01.26	2.02.2026			
2	Study of boiler mountings and accessories	4.02.26	09.02.2026			
3	Study of steam turbine through models.	11.02.26	16.02.26			
4	Leak detection of refrigeration equipment	18.03.26	23.02.26			
5	Conduct performance test on VCR test rig to determine COP of the refrigerator	25.03.26	2.03.26			
6	Conduct performance test on reciprocating compressor	18.03.26	16.03.26			
7	Conduct Morse test to determine the indicated power of individual cylinders	25.03.26	23.03.26			
8	Conduct Performance test on 2/4-Stroke CI/SI engine.	01.04.26	30.03.26			
9	Conduct Heat balance test on CI/SI engine..	08.04.26	13.04.26			
10	Thermal conductivity test on Thick slab/Thick cylinder	22.04.26	20.04.26			
11		29.04.26	27.04.26			
12		13.04.26	11.04.26			
13		20.05.26	18.05.26			
14			25.05.26			
15						

Signature of Course Teacher with Name

(W. Khil Sharma)

Approved by

OIC/HoD/Principal