

LESSON PLAN (AY 2026-27 W)

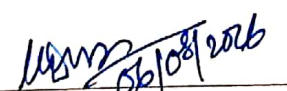
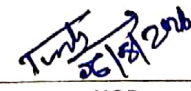
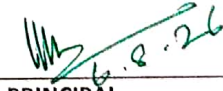
Discipline: Metallurgical Engineering	Semester: 5 TH Semester	Name of the Teaching Faculty: Er Sushree Subhashree Das
Course: HEAT TREATMENT LAB Course code: (PR 2) M3	No of days /week class allotted: 04	Semester from Date: 01.07.2026 to 05.11.2026 No of weeks: 16

LEARNING OUT COMES:

After completion of the course, the students will be able to:

1. Familiarize students with heat treatment equipment and procedures.
2. Develop practical skills in performing heat treatment processes.
3. Identify the relationship between heat treatment, microstructure, and properties.
4. Learn to analyse and interpret results from heat treatment experiments.
5. Develop skills in metallographic sample preparation and analysis

Month	week	No of periods available	Class Day	COURSE CONTENTS	CO
JULY	1 st	04	02.07.2026	Briefing about the Syllabus	CO1
	2 nd	04	09.07.2026	Metallographic study of cylindrical/cubical nonferrous alloy sample by grinding, polishing and etching.	CO1
	3 rd	04	23.07.2026	Lab Record Write Lab Record Submission and Check	CO1
	4 th	04	30.07.2026	Experiment on Annealing of plain carbon steel.	CO2
AUGUST	2 nd	04	06.08.2026	Lab Record Write Lab Record Submission and Check	CO2
	3 rd	04	11.08.2026	Experiment on Normalising of plain carbon steel	CO2
	4 th	04	18.08.2026	Lab Record Write Lab Record Submission and Check	CO2
	5 th	04	25.08.2026	Experiment on Hardening (water quenching) of plain carbon steel.	CO2
SEPTEMBER	1 st	04	01.09.2026	Lab Record Write Lab Record Submission and Check	CO2
	2 nd	04	08.09.2026	Experiment on Pack carburizing of plain carbon steel	CO2
	4 th	04	22.09.2026	Lab Record Write Lab Record Submission and Check	CO3
	5 th	04	29.09.2026	Experiment on Heat Treatment of Non-Ferrous Alloys	CO3
OCTOBER	2 nd	04	06.10.2026	Lab Record Write Lab Record Submission and Check	CO3
	3 rd	04	13.10.2026	Micro hardness measurement of various heat treated steel samples.	CO4
	4 th	04	27.10.2026	Lab Record Write Lab Record Submission and Check	CO4
NOV	1 st	04	03.10.2026	VIVA	ALL CO

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