

LESSON PLAN

Discipline: Metallurgical Engineering	Semester: 3rd Semester	Name of the Teaching Faculty: Er Parasmita Biswal
Subject: FTCA LAB Sub code: (PR:2)	No of days /week class allotted:2	Semester from Date: 01/07/2026 to 05/11/2026 No of weeks: 19

1. Ability to Conduct Fuel Tests

To perform various standardized fuel testing procedures (e.g., flash point, fire point, viscosity, calorific value) using equipments and methods.

2. Understanding of Fuel Properties and Performance

To relate fuel characteristics to performance metrics and combustion behavior.

3. Proficiency in Analyzing and Interpreting Test Results

To interpret laboratory results accurately, identifying fuel quality and performance characteristics, and use the data to evaluate fuel suitability for specific applications.

Month	week	No of periods available	Class Day	Theory topics	CO
JULY	1st	4P	03-07-2026	Briefing about syllabus	CO1
	2nd	8P	07-07-2026	Experiment on Proximate analysis of coal	CO1
			10-07-2026	Lab record checking	
			14-07-2026	Experiment on determination of the flash point of petrol by using Pensky Martens apparatus	CO1
	3rd	8P	17-07-2026	Lab record checking	
	4TH	8P	21-07-2026	Experiment on determination of the fire point of petrol by using Pensky Martens apparatus	CO1
			24-07-2026	Lab record checking and submission	
	5th	8P	28-07-2026	Experiment on determination of the fire point of diesel by using Pensky Martens apparatus	CO1
			31-07-2026	Lab record checking	
AUG	2nd	8P	04-08-2026	Experiment on determination of the flash point of diesel by using Pensky Martens apparatus	CO1
			07-08-2026	Lab record checking and submission	
	3rd	8P	11-08-2026	Experiment on determination of the of Fe in iron ore	CO2
			14-08-2026	Lab record checking	

	4th	8P	18-08-2026	Experiment on Titration of ferrous ions with a standard solution	CO2	
			21-08-2026	Lab record checking and submission		
	5th	8P	25-08-2026	Experiment on determination of Mg in dolomite ore	CO2	
			28-08-2026	Experiment on EDTA titration of mg	CO2	
SEPT	1st	4P	01-09-2026	Lab record checking and submission		
	2nd	8P	08-09-2026	To determine the calorific value of coal using Bomb calorimeter	CO2	
			11-09-2026	Lab record checking		
	3rd	4P	18-09-2026	To determine start ignition	CO2	
	4th	8P	22-09-2026	Calculate calorific value	CO2	
			25-09-2026	Lab record checking and submission		
	5th	4P	29-09-2026	Determination of Cu in Brass	CO2	
	OCT	2nd	8P	06-10-2026	Lab record checking	
				09-10-2026	Determination of Zn in Brass	CO3
		3rd	8P	13-10-2026	Lab record checking and submission	
16-10-2026				Determine Micum Index of given coal /coke sample	CO2	
4th		8P	23-10-2026	Find out M10 and M40 index	CO2	
5th		8P	27-10-2026	Lab record checking and submission	CO2	
			30-10-2026	Determine Shatter Index of given coal /coke sample	CO2	
NOV		1st	4P	03-11-2026	Lab record checking and submission	

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6/8/26

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