

## LESSON PLAN 2025(W)

SUBJECT:- NON FERROUS METALLURGY

SUBJECT CODE:- TH-5

SEMESTER:-5<sup>th</sup>

BRANCH:-METALLURGICAL

NAME OF FACULTY:-Sagarika Palei

CLASS ALLOTTED:-4P/WEEK

WEEKS	DATE	DATE :- FROM- 14/07/2025 TO 15/11/2025	TEACHING AID
		THEORY- TOPIC/LESSON	
1	15/07/2025 TO 19/07/2025	1.Discuss the non-ferrous ore reserves in India & non ferrous industries in India.  2.0Extraction of Metals from Oxide ores Extraction of aluminum	White board & Marker
2	21/07/2025 TO 26/07/2025	Describe the Bayer's process of alumina production.  Explain the fused salt electrolysis of alumina by Hall Heroult process	White board & Marker
3	28/07/2025 TO 02/08/2025	Discuss anode effect Explain the method of refining of State the uses of aluminum.	White board & Marker
4	04/08/2025 TO 09/08/2025	Extraction of Tin Explain the process of tin ore concentration	White board & Marker
5	11/08/2025 TO 16/08/2025	Explain the process of concentrate smelting for tin extraction. Describe the process of refining of tin State the uses of tin	White board & Marker
6	18/08/2025 TO 23/08/2025	<b>Extraction of Metals from Sulphide Ores.</b> Pyrometallurgical Extraction of Copper. Describe the process of roasting of copper ore. Describe the process of matte smelting of copper ore. Explain the process of converting of copper matte.	White board & Marker
7	25/08/2025 TO 30/08/2025	Explain the refining of copper. State the uses of copper Pyrometallurgical Extraction of Lead. Explain roasting and sintering of lead ore.	White board & Marker
8	01/09/2025 TO 06/09/2025	Explain the process of extraction of lead by blast furnace smelter. Describe in detail the process of refining of base bullion. State the uses of lead Pyrometallurgical and Hydrometallurgical Method of Extraction of Zinc Describe the roasting of zinc ore concentrate.	White board & Marker
9	08/09/2025 TO 13/09/2025	Explain how zinc is extracted by vertical retort process. Explain the refining of zinc Explain the process of leaching and preparation zinc base solution Describe the electrolysis of zinc solution State the uses of zinc	White board & Marker

	15/09/2025 TO 20/09/2025	Pyrometallurgical Method of Nickel Extraction. Explain the roasting of nickel ore. Explain the method of smelting of nickel concentrate.	White board & Marker
11	22/09/2025 TO 27/09/2025	Explain the method of refining of nickel State the uses of nickel. <b>Extraction of Metals from Halides.</b> Extraction of Titanium Describe extraction of titanium	White board & Marker
12	08/10/2025 TO 11/10/2025	Explain the type of treatment given to titanium ore Explain the process of chlorination and mag. reduction for titanium extraction	White board & Marker
13	13/10/2025 TO 18/10/2025	Explain the process of refining of titanium (distillation) State the uses of titanium	White board & Marker
14	20/10/2025 TO 25/10/2025	<b>Extraction of Precious Metals</b> Explain extraction of gold.  Explain the process of cyanidation for gold extraction	White board & Marker
15	27/10/2025 TO 01/11/2025	State the uses of gold <b>Production of Secondary Metals.</b> Explain the process of production of copper	White board & Marker
16	03/11/2025 TO 08/11/2025	, lead zinc aluminum metals from scraps.	White board & Marker
17	10/11/2025 TO 15/11/2025	Revision.....	White board & Marker

  
Signature of HOD

  
Signature of Faculty