

LESSON PLAN

DISCIPLINE - METALLURGICAL ENGINEERING		SEMESTER - 5 th semester		NAME OF THE TEACHING FACULTY- Miss Bhagyashree Bal
SUBJECT – NON FERROUS METALLURGY SUB CODE- Th.5		NO OF DAYS/ WEEK CLASS ALLOTTED-04		SEMESTER FROM DATE: - 13-8-24 TO 08-11-24
MONTH	WEEK	NO. OF PERIODS AVAILABLE	CLASS DAY	THEORY TOPIC
AUG	1 st	03P	13-08-24	1.0- Introduction and Discuss non – ferrous ores reserve in India
			13-08-24	2.1- Details about Aluminium
			17-08-24	2.1.1-Extraction of Aluminium i.e., Bayer's process of alumina production 2.1.2- Explaining fused salt electrolysis of alumina by Hall Heroult process
	2 nd	03P	20-08-24	2.1.3-Explain the method of refining of aluminium
			20-08-24	2.1.4- state the uses of aluminium
			24-08-24	2.2.1- Details about tin & explain the process of tin ore concentrate
	3 rd	02P	27-08-24	2.2.2-Explain the process of concentrate smelting tin extraction
			27-08-24	2.2.3-Describe the process of refining of tin and its uses
	4 th	01P	31-08-24	3.1- Details about Cu & Extraction of copper 3.1.1-Describe the process of roasting of copper ore
	SEPT	5 th	03P	02-09-24
03-09-24				3.1.4- Explain the process of refining of copper
03-09-24				3.1.5- State the uses of copper
6 th		04P	09-09-24	3.2- Pyrometallurgical extraction of lead
			10-09-24	3.2.1-Explain roasting and sintering of lead ore
			10-09-24	3.2.2-Explain the process of extraction of lead by blast furnace smelter
			14-09-24	3.2.3- Describe in detail the process of refining of base bullion
		03P	17-09-24	3.2.4-state the uses of lead

	7 th		17-09-24	3.3-Describe the extraction of Zinc by pyrometallurgical and hydrometallurgical method
			21-09-24	3.3.1- Describe the roasting of zinc ore concentrate
				3.3.2-Explain how zinc is extracted by vertical retort process
	8 th	04P	23-09-24	3.3.3- Explain the refining of zinc
			24-09-24	3.3.4- Explain the process of leaching & preparation of zinc base solution
			24-09-24	3.3.5- Describe the electrolysis of zinc solution
			28-09-24	3.3.6-State the uses of zinc
	9 th	01P	30-09-24	3.4-0 Pyrometallurgical method of Nickel extraction
	OCT	10 th	03P	01-10-24
01-10-24				3.4.2- Explain the method of smelting of nickel concentrate
05-10-24				3.4.3-Explain the method of refining of nickel
11 th		04P	14-10-24	3.4.4- State the uses of Nickel
			15-10-24	Monthly Test
			15-10-24	4.0- Extraction of metals from Halides
			19-10-24	4.1- Extraction of Titanium
12 th		04P	21-10-24	4.1.1- Describe extraction of titanium
			22-10-24	4.1.2- Explain the type of treatment given to titanium ore
			22-10-24	4.1.3- Explain the process of chlorination & mag. Reduction for titanium extraction
			26-10-24	4.1.4-Explain the process of refining of titanium (distillation)
13 th		01P	28-10-24	4.1.5- State the uses of titanium 5.0-Extraction of precious metals
NOV		14 th	02P	02-11-24
	04-11-24			5.2- Explain the process of cyanidation for gold extraction
	16 th	02P	05-11-24	5.3- state the uses of gold
			05-11-24	6.0-Production of secondary metals

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