

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

Discipline :		Semester: 3rd Sem		Name of the Teaching Faculty :SOURAV ADHYA	
Subject :NFM		No. of Days / per week class allotted : 04		Semester From date : 15.09.2022	To Date : 21.01.2023
MONTH	Week	Day	Unit	Topics	
SEPTEMBER	3rd	5th	UNIT-1	Non-ferrous ore Reserves and Non-ferrous Metal Industries in India	
		3rd	UNIT-2	Extraction of Metals from Oxide Ores	
	4th	3rd		Describe the Bayer's process of alumina production.	
		4th		Explain the fused salt electrolysis of alumina by Hall Heroult process.	
		5th		Discuss anode effect. Explain the method of refining of aluminum State the uses of aluminum.	
		3rd	UNIT-3	Explain the process of tin ore concentration. Explain the process of concentrate smelting	
	5th	3rd		Describe the process of refining of tin. State the uses of tin.	
		4th		Extraction of Metals from Sulphide Ores	
		5th		Describe the process of roasting of copper ore. Describe the process of matte smelting	
		3rd		Explain the process of converting of copper matte. Explain the refining of copper. State the uses of copper.	
OCTOBER	2nd			Durga Puja holiday	
	3rd	3rd		Explain roasting and sintering of lead ore. Explain the process of extraction of lead by blast furnace smelter	
		4th	UNIT-4	Describe in detail the process of refining of base bullion. State the uses of lead.	
		5th		Describe the roasting of zinc ore concentrate. Explain how zinc is extracted by vertical retort process. Explain the refining of zinc	
		3rd		Explain the process of leaching and preparation zinc base solution Describe the electrolysis of zinc solution State the uses of zinc	
	4th	4th		Explain the roasting of nickel ore. Explain the method of smelting of nickel concentrate.	
		5th	UNIT-5	Explain the method of refining of nickel State the uses of nickel.	
		3rd		Extraction of Metals from Halides	
		4th		Describe extraction of titanium Explain the type of treatment given to titanium ore.	
	5th	3rd	UNIT-6	Explain the process of chlorination and mag. reduction for titanium extraction. Explain the process of refining of titanium (distillation) State the uses of titanium	
				Diwali (holiday)	
		4th		Extraction of Precious Metals	

		5th		Extraction of Precious Metals
	6th	3rd		Extraction of Precious Metals
NOVEMBER	1st	3rd	UNIT-7	Extraction of Precious Metals
		4th		Extraction of Precious Metals
		5th		Explain extraction of gold.
	2nd	4th		Explain extraction of gold.
		5th		Explain extraction of gold.
				Rash purnima(holiday)
	3rd	4th	UNIT-8	Explain extraction of gold.
		3rd		Explain extraction of gold.
		4th		Explain the process of cyanidation for gold extraction
		5th		Explain the process of cyanidation for gold extraction
		3rd		Explain the process of cyanidation for gold extraction
	4th	2nd		Internal assesment
		3rd		Internal assesment
		4th	UNIT-9	Explain the process of cyanidation for gold extraction
	5th	5th		Explain the elementary pinciple of froth flotation.
		3rd		Explain the practical utility of frothre, collector
		4th		State the uses of gold.
DECEMBER	1st	3rd		State the uses of gold.
		4th		State the uses of gold.
	2nd	5th		State the uses of gold.
		3rd		Production of Secondary Metals
		4th		Production of Secondary Metals.
		1st		CLASS TEST-1
	3rd	3rd	UNIT-10	Production of Secondary Metals
		4th		Production of Secondary Metals
		5th		Production of Secondary Metals
		3rd		Explain the process of production of copper, lead
	4th	3rd		Explain the process of production of copper, lead
		4th		Zinc &. aluminum metals from scraps.
		5th		Zinc &. aluminum metals from scraps.
JANUARY	1st	1st		Revision on unit 1-5
		2nd		Revision on unit 1-5
		4th		Revision on unit 1-5
	2nd	4th		Revision on unit 6-10
		3rd		Revision on unit 6-10
		1st		Revision on unit 6-10

JANUARY	3rd	4th		Previous year question discussion
		3rd		Previous year question discussion
		1st		Previous year question discussion
	4th	4th		Previous year question discussion
		3rd		Previous year question discussion
		2nd		Previous year question discussion