

GOVT. POLYTECHNIC MAYURBHANJ
LESSON PLAN 2023-24

DEPARTMENT : METALLURGY ENGG		SEMESTER: 5TH		NAME OF THE TEACHING FACULTY : SATYABRATA GIRI	
SUBJECT : NFM		NO OF DAYS/ PER WEEK CLASS ALLOTTED		SEMESTER FROM DATE : 01.08.2023 TO DATE : 30.11.2023	
MONTH	WEEK	DAY	UNIT	TOPICS	
AUGUST	1ST	2ND	UNIT-1	NON FERROUS ORE RESERVES AND NON FERROUS INDUSTRIES IN INDIA	
				Discuss the non-ferrous ore reserves in India & non ferrous industries in India.	
		3RD		EXTRACTION OF METALS FROM OXIDE ORES	
		4TH		Extraction of aluminum	
	2ND	5TH	UNIT 2	Describe the Bayer's process of alumina production.	
		2ND		Explain the fused salt electrolysis of alumina by Hall Heroult process	
		3RD		Discuss anode effect	
		4RD		Explain the method of refining of aluminum	
	3RD	5TH	UNIT 2	State the uses of aluminum.	
				15TH AUG INDEPENDENCE DAY	
		3RD		Extraction of Tin	
		4TH		Explain the process of tin ore concentration.	
	4TH	5TH	UNIT 2	Explain the process of concentrate smelting for tin extraction.	
		2ND		Describe the process of refining of tin.	
		3RD		State the uses of tin.	
		4TH		EXTRACTION OF METALS FROM SULPHIDE ORES	
	5TH	5TH	UNIT 2	PYROMETALLURGICAL EXTRACTION OF COPPER	
				Describe the process of roasting of copper ore	
		2ND		Describe the process of matte smelting of copper ore.	
				RAKSHA BANDHAN	
	4TH		CLASS TEST 1		

SEPTEMBER	1ST	5TH	UNIT-3	Explain the process of converting of copper matte				
				Explain the refining of copper.				
				State the uses of copper.				
				PYROMETALLURGICAL EXTRACTION OF LEAD				
				Explain roasting and sintering of lead ore.				
	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							
	JANMASHTAMI							
	2ND	2ND		UNIT-3	Describe the roasting of zinc ore concentrate.			
					Explain how zinc is extracted by vertical retort process			
		4TH			UNIT-3	Explain the refining of zinc.		
						Explain the process of leaching and preparation zinc base solution		
						Describe the electrolysis of zinc solution		
	3RD	2ND				UNIT-3	State the uses of zinc	
							PYROMETALLURGICAL METHOD OF EXTRACTION OF NICKEL	
		3RD					UNIT-3	Explain the roasting of nickel ore
								Explain the method of smelting of nickel concentrate.
								Explain the method of refining of nickel
4TH		UNIT-3	State the uses of nickel.					
			EXTRACTION OF METALS FROM HALIDES					
4TH	5TH			UNIT 4	Extraction of titanium			
					GANESH CHATURTHI			
	3RD				UNIT 4			Describe extraction of titanium
						Explain the type of treatment given to titanium ore.		
						Explain the process of chlorination and mag. reduction for titanium extraction		
4TH			UNIT 4			Explain the process of refining of titanium (distillation)		
						State the uses of titanium		
5TH						UNIT 4	EXTRACTION OF PRECIOUS METALS	
		2ND						

	5TH	3RD	UNIT 5	Explain extraction of gold and Explain the Process of cyanidation for gold extraction	
				MILAD UN-NABI/ID-E-MILAD	
		5TH		State the uses of gold.	
OCTOBER	1ST	2ND	UNIT 6	PRODUCTION OF SECONDARY METALS	
		3RD		Explain the process of production of copper, lead, zinc & aluminum metals from scraps	
		4TH	REVISION	REVISION ON UNIT 1-2	
		5TH		REVISION ON UNIT 3-4	
	2ND	REVISION ON UNIT 4-5			
	3RD	REVISION ON UNIT 5-6			
	4TH	REVISION FROM UNIT 1-6			
	5TH	INTERNAL EXAM			
	2ND	2ND		PUJA HOLIDAY	DURGA PUJA
		3RD			
		4TH			
		5TH			
	3RD	3RD	REVISION OF PREVIOUS		
		4TH			
		5TH			
		2ND			
4TH	3RD				
	4TH				
	5TH				
5TH	2ND				
NOVEMBER	1ST	3RD			
		4TH			
		5TH			
	2ND	2ND			
		3RD			
		4TH			
		5TH			
	2ND				

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3RD	3RD	PREVIOUS US YEAR QUESTI ONS
	4TH	
	5TH	
4TH	2ND	
	3RD	
	4TH	
	5TH	
5TH	2ND	
	3RD	
	4TH	

PREVIOUS YEAR QUESTION DISCUSSION