

GOVERNMENT POLYTECHNIC JAIPUR

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Discipline: Metallurgy	Semester: 5TH	Name of the Teaching faculty: P ARADHANA
Subject: NON-FERROUS METALLURGY	No of Days/Week class allotted: 4	Semester from Date: 14/7/25 To Date: 15/11/25 No of weeks:
Week	Class Day	Topics
1st	1 st	Non-Ferrous Ore Reserves In India & Non Ferrous Industries In India.
	2 nd	Extraction Of Metals From Oxide Ores: Extraction Of Aluminium By Bayers Process Of Alumina Production
	3 rd	Bayers Process Of Alumina Production
	4 th	Fused Salt Electrolysis Of Alumina By Hall Heroult Process & Anode Effect
2nd	1 st	Fused Salt Electrolysis Of Alumina By Hall Heroult Process & Anode Effect
	2 nd	Refining Of Aluminium & Uses Of Aluminium
	3 rd	Refining Of Aluminium & Uses Of Aluminium
	4 th	Extraction Of Tin: Process Of Concentrate Smelting For Tin Extraction
3rd	1 st	Process Of Concentrate Smelting For Tin Extraction
	2 nd	Process Of Refining Of Tin & Uses Of Tin
	3 rd	Extraction Of Metals From Sulphide Ores: Pyrometallurgical Extraction Of Copper
	4 th	Pyrometallurgical Extraction Of Copper
4th	1 st	Process Of Roasting Of Copper Ore
	2 nd	Process Of Roasting Of Copper Ore
	3 rd	Process Of Matte Smelting Of Copper Ore.
	4 th	Process Of Matte Smelting Of Copper Ore.
5th	1 st	Converting Of Copper Matte.
	2 nd	Refining Of Copper & Uses Of Copper
	3 rd	Refining Of Copper & Uses Of Copper
	4 th	Pyrometallurgical Extraction Of Lead
6th	1 st	Pyrometallurgical Extraction Of Lead
	2 nd	Roasting And Sintering Of Lead Ore.
	3 rd	Roasting And Sintering Of Lead Ore.
	4 th	Extraction Of Lead By Blast Furnace
7th	1 st	Extraction Of Lead By Blast Furnace
	2 nd	Refining Of Base Bullion & Uses Of Lead
	3 rd	Refining Of Base Bullion & Uses Of Lead
	4 th	Refining Of Base Bullion & Uses Of Lead
8th	1 st	Pyrometallurgical And Hydrometallurgical Method Of Extraction Of J Zinc
	2 nd	Pyrometallurgical And Hydrometallurgical Method Of

		Extraction Of J Zinc
	3 rd	Pyrometallurgical And Hydrometallurgical Method Of Extraction Of J Zinc
	4 th	Roasting Of Zinc Ore Concentrate.
9 th	1 st	Roasting Of Zinc Ore Concentrate.
	2 nd	Vertical Retort Process
	3 rd	Vertical Retort Process
	4 th	Refining Of Zinc
10 th	1 st	Refining Of Zinc
	2 nd	Leaching And Preparation Zinc Base Solution
	3 rd	Leaching And Preparation Zinc Base Solution
	4 th	Leaching And Preparation Zinc Base Solution
11 th	1 st	Electrolysis Of Zinc Solution & Uses Of Zinc
	2 nd	Electrolysis Of Zinc Solution & Uses Of Zinc
	3 rd	Pyrometallurgical Method Of Nickel Extraction:
	4 th	Pyrometallurgical Method Of Nickel Extraction:
12 th	1 st	Roasting Of Nickel Ore
	2 nd	Roasting Of Nickel Ore
	3 rd	Smelting Of Nickel Concentrate
	4 th	Smelting Of Nickel Concentrate
13 th	1 st	Refining Of Nickel & Its Uses
	2 nd	Extraction Of Metals From Halides: Extraction Of Titanium
	3 rd	Type Of Treatment Given To Titanium Ore.
	4 th	Type Of Treatment Given To Titanium Ore.
14 th	1 st	Process Of Chlorination And Mag. Reduction For Titanium Extraction.
	2 nd	Process Of Chlorination And Mag. Reduction For Titanium Extraction.
	3 rd	Process Of Refining Of Titanium (Distillation)&Uses Of Titanium
	4 th	Process Of Refining Of Titanium (Distillation)&Uses Of Titanium
15 th	1 st	Extraction Of Precious Metals: Extraction Of Gold.
	2 nd	Cyanidation For Gold Extraction & Uses Of Gold
	3 rd	Cyanidation For Gold Extraction & Uses Of Gold
	4 th	Production Of Secondary Metals
16 th	1 st	Process Of Production Of Copper From Scrap
	2 nd	Process Of Production Of Copper From Scrap
	3 rd	Process Of Production Of Lead From Scrap
	4 th	Process Of Production Of Lead From Scrap
17 th	1 st	Process Of Production Of Zinc From Scrap
	2 nd	Process Of Production Of Zinc From Scrap
	3 rd	Process Of Production Of Aluminium From Scrap
	4 th	Process Of Production Of Aluminium From Scrap


 14/7/21
 Lect. Metallurgy