

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH



PROGRESS REGISTER Session-2022-2023

Discipline: Metallurgical Engg.

Semester: 4th Subject: PEM

Name of the Teaching Faculty: _____

Subject: PEM No. of Days/per week class allotted 04

Semester From Date: 14.2.23 To Date: 23.05.23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
14.2.23	Introduction, Definitions of metallurgical terms	Introduction	Same	<u>AA</u>
15.2.23	cast- do	Definitions	Definitions with examples	<u>AA</u>
16.2.23	Definitions: Minerals & ores	Same	Factors, differences	<u>AA</u>
20.2.23	Crucible, flux	Same	composition, uses	<u>AA</u>
21.2.23	Definition of slag, matte, speiss	Explanations	composition	<u>AA</u>
22.2.23	Metals & alloys	Properties & uses	properties composition uses.	<u>AA</u>
23.2.23	Pretreatment of ores	Introduction	necessity	<u>AA</u>
27.2.23	Drying	Same	Process details	<u>AA</u>
28.2.23	Calcination	Process variables	Process purposes	<u>AA</u>
1.3.23	Principles of roasting	Principles figures	reactions examples	<u>AA</u>
2.3.23	Agglomeration	Principles	Types	<u>AA</u>

Subject: PDM No. of Days/per week class allotted 04

Semester From Date: 14.2.23 To Date: 23.6.23 No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (In brief)	Signature of Teacher
5.3.23	Amalgamation	Principles factors	Adv. Disadv.	<u>AK</u>
6.3.23	Reduction process	Same	Principles, adv. limitations	<u>AK</u>
9.3.23	Valuum extension	Same	Explanation figure	<u>AK</u>
13.3.23	Sintering process	Principles variables	Same	<u>AK</u>
14.3.23	Pelletizing process	Same	Principles, pelletizers adv	<u>AK</u>
15.3.23	General methods of extraction	Introduction	Introduction	<u>AK</u>
16.3.23	Pyrometallurgical process	Same	Processes	<u>AK</u>
20.3.23	Comparison Pyro and hydrometallurgy	Same	Adv. & disadv.	<u>AK</u>
21.3.23	Roasting process	Introduction	Types of roasting	<u>AK</u>
22.3.23	Roasting methods	Discussion, methods types	oxidizing, chloridizing Sulphatizing etc	<u>AK</u>
23.3.23	Ellingham diagram	Construction	Features uses	<u>AK</u>

Subject: PEM No. of Days/per week class allotted 04

Semester From Date : 14-2-23 To Date : 23-5-23 No. of Weeks : 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (In brief)	Signature of Teacher
27.3.23	Predominance area diagram	Same	Construction	<u>AA</u>
28.3.23	Smelting practices	Introduction	Types of smelting	<u>AA</u>
29.3.23	Matte & hearth smelting	Same	principles, reactions	<u>AA</u>
3.4.23	Distillation process	Introduction	Same	<u>AA</u>
4.4.23	Sublimation	Same	Same	<u>AA</u>
5.4.23	Conversion of matte & pig iron	reactions	Same	<u>AA</u>
6.4.23	Hydrometallurgy	Introduction	Introduction	<u>AA</u>
10.4.23	Adv & disadv.	Same	adv and disad.	<u>AA</u>
11.4.23	Stages of hydrometallurgy	Same	Same	<u>AA</u>
12.4.23	Cont. to	Same	Explanations	<u>AA</u>
13.4.23	Flow diagram	Same	Same	<u>AA</u>

Subject: PCCMNo. of Days/per week class allotted 04Semester From Date: 14.2.23To Date: 23.4.23No. of Weeks: 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (In brief)	Signature of Teacher
17.4.23	Leaching methods	principles	same	<u>AB</u>
18.4.23	Backward, pressure leaching	same	same	<u>AB</u>
19.4.23	Electrometallurgy, Electrolysis	Introduction	Adv dis adv.	<u>AB</u>
20.4.23	Emf series Faraday's laws	Emf series same	Electrode potential	<u>AB</u>
24.4.23	Faraday's laws of electrolysis	1st, 2nd laws	Applications 1st, 2nd law	<u>AB</u>
25.4.23	Electrominny of metals	Flow sheet	Explanation	<u>AB</u>
26.4.23	Electrorefining	Flow sheet principles	same	<u>AB</u>
27.4.23	Idea on refining process	Introduction	same	<u>AB</u>
1.5.23	Zone refining Fire refining	Principles	Process, applications	<u>AB</u>
2.5.23	Principle of metal extraction	Introduction	same	<u>AB</u>
3.5.23	Thermodynamics 1st, 2nd laws	same	same	<u>AB</u>

