PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH

PROGRESS REGISTER

Session-2022-2023

Discipline: Metallurgical Engg.

Semester: 3rd Subject: MP

Name of the Teaching Faculty: Anadi ch. Jena

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

Semester From Date : 15.9.22 To Date : 21.1.23 No. of Weeks : 15

Date	Topics to be covered as per Lesson Plan	Topics actually covered	Points/contents Discussed (in brief)	Signature of Teacher
15.9.22	Mineral resources of India	Mineral resources	Introduction, minerals, ores	
16.9.22	Minerals, scope, objective	Same	Same	
19.9.22	Cont. do	Same	Resources of Fe, Al, Zn, Mg etc.	
22.9.22	Cont. to	Same	Resources of gold, Cu, Mn, tin etc.	
23.9.22	Crushing	Comminution	Mineral dressing flowsheet	
24.9.22	Comminution, liberation	Comminution	adv. disadv. flowsheet	
26.9.22	liberation	Liberation	Principles examples	
29.9.22	Crushing	Crushers	Types of crushers	
30.9.22	Crushing operations.	Same	open, closed ckt. crushing	
10.10.22	Types of crushers	Same	Different crushers	
13.10.22	Angle of nip	game	Roll crusher, feeding system	

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14.10.22	Blake, Dodge Crusher	Blake Crushers	Comparision between two	
15.10.22	Blake Crushers	Working principles	Different parts	
17.10.22	Dodge Crushers	Same	Working Principle	
20.10.22	Dodge Crushers	Same	characteristics	
21.10.22	Gyratory Crushers	Principles	characteristics	
22.10.22	Gyratory Crushers	Diagram	explanation	
27.10.22	Grinding	Same	fine crushing & coarse crushing	
28.10.22	Grinding Circuit	Same	explanation	
29.10.22	Grinding equipment	Grinding equipment	Same	
31.10.22	Grinding	Types of grinding	Dry & wet grinding	
3.11.22	Ball mills	Ball mills	operation, characteristics	

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4.11.22	Rod mills	working principles	Explanation	
5.11.22	Tube mills	Difference from Rod mills	Same	
7.11.22	Laboratory sizing	Same	Sizing need for sizing	
10.11.22	Laboratory sizing	Same	Sizing Scales, standards	
11.11.22	Cont. to	Laboratory sizing	explanation	
12.11.22	Size analysis	Size analysis	explanation	
14.11.22	Methods of screening	Screening purposes	Size Parameters etc.	
17.11.22	Size analysis	Size analysis	Arithmatic sizing	
18.11.22	Cont. to	Same	Particle size analysis	
19.11.22	Methods of screening	Same	Hand and automatic screening	
21.11.22	Sieve analysis	Same	Rotap-sieve shaker	

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24.11.22	Industrial Screening	Industrial Screening	Purposes	
25.11.22	Screening operation	Same	Types of industrial screens	
26.11.22	Characteristics of Screening	Same	efficiency, effectiveness	
28.11.22	Classification	Classification	Purposes	
1.12.22	classifiers	Types of classifiers	Same	
2.12.22	Gravity concentration	Introduction	Principles	
3.12.22	Flowing film concentration	Same	Principles	
5.12.22	Characteristics of the process	Stratification	principles	
8.12.22	Wilfley tabling	Wilfley Tabling	working operations	
9.12.22	Operation of the table	Same	Same	
10.12.22	Jigging	Jigging	working methods	

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12.12.22	stratification in jigs	same	stratification factors	[signature]
15.12.22	Types of jigs	same	Types, uses	[signature]
16.12.22	Heavy media separation	same	purposes	[signature]
17.12.22	Principles of heavy media separation	same	Liquid and suspensions	[signature]
19.12.22	Industrial process	use of heavy liquids	Lessing Bertrand process	[signature]
22.12.22	Industrial process	use of heavy suspensions	Chance process	[signature]
23.12.22	Industrial process	use of heavy liquids	Du pont process	[signature]
24.12.22	Industrial process	use of heavy liquids	comparisons	[signature]
26.12.22	Flotation process	same	same	[signature]
29.12.22	principles of flotation	same	Principles applications	[signature]
30.12.22	skin and froth flotation	same	Difference	[signature]

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31.12.22	Frothing reagents	Same	explanations	
3.1.23	frotheres collectors	Same	Purpose, operation	
5.1.23	Modifiers	collecting actions	Applications	
7.1.23	Flotation cells	Description	Types applications	
9.1.23	Magnetic & electrostatic separators	Same	Principles	
12.1.23	Same	Types	Principles applications	
14.1.23	Electrostatic Separation	Working principle	Types	
20.1.23	Applications	Magnetic electrostatic separators	Same	