GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

Discipline :		Semester: 3rd Sem		Name of the Teaching Faculty : Sushree Subhashree Das
Subject : MP		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	2nd	UNIT-1	Various mineral resources of India
		3rd	UNIT-2	Distinction between mineral and ore
	4th	2nd		Explain the scope of mineral dressing
		3rd		Communication and liberation
		2nd		Different physical and chemical properties of ore
		3rd	UNIT-3	Crushings: Describe crushing operations
	5th	2nd		Explain the type of crushers: Blake & Dodge crusher
		3rd		Describe capacity and reduction ratio of crusher
		2nd		Explain angle of nip of a crusher
		3rd		Explain in details gyratory and roll crusher
OCTOBER	2nd			Durga Puja holiday
	3rd	2nd		Explain the principle of operation of gyratory and roll cusher
		3rd	UINT-4	**Grinding:** Classify different types of grinding equipements
		2nd		Explain the ball mill operations
		3rd		State the difference between open circuit and close circuit grinding
	4th	2nd		State the difference between dry grinding and wet ginding
		3rd	UNIT-5	**Laboratory sizing technique**: Explain the methods of size analysis
		2nd		Describe different types of standard screens with screening techniques
		3rd		Explain in details rotap shieve shaker
	5th	2nd	UNIT-6	**Industrial screening:** Explain the principle of screening.
		3rd		Diwali (holiday)
		2nd		Classify types of screening.
		3rd		Explain the effectiveness, capacity, efficiency of industrial screens.
	6th	2nd		Explain different types of classifiers and their applications.
NOVEMBER	1st	3rd	UNIT-7	**Gravity concentration:** Describe the general priniples of flowing film concentrain.
		2nd		Describe in details the operation and application of wilfley table.
		3rd		Define jigging.
	2nd	2nd		Describe the factors affecting srtatification in jigs.
		3rd		Explain the types of jigs and their uses.
		2nd		Rash purnima(holiday)
		3rd	UNIT-8	**Heavy media separation:** Explain the fundamental principle of heavy media separations.
	3rd	2nd		Explain the different industrial processes using heavy liquid and heavy suspensions
		3rd		Details of heavy media suspension.
		2nd		Du-pont process
		3rd		chance process.
	4th	2nd		Internal assesment
		3rd		Internal assesment
		2nd	UNIT-9	**Flotation:** Define froth and skin flotation.
		3rd		Explain the elementary pinciple of froth flotation.
	5th	2nd		Explain the practical utility of frothre, collector
		3rd		Explain the practical utility of modifier
DECEMBER	1st	2nd		Explain the practical utility of activator
		3rd		Explain the practical utility of depressant (without physic- chemical principles)
	2nd	2nd		Describe the application with practical examples of froth flotation process.
		3rd		Describe different types of flotation cells.
		2nd		Discussion on application of the flotation processes.
		3rd		CLASS TEST-1
	3rd	2nd	UNIT-10	**Magnetic & Elecrostatic Separator**
		3rd		Explain the principle of magnetic separator with their application to mineral dressing
		2nd		Explain the principle of magnetic separator with their application to mineral dressing

		3rd		Explain the principle of magnetic separator with their application to mineral dressing
	4th	2nd		Explain the principle of electrostatic separator with their application to mineral dressing
		3rd		Explain the principle of electrostatic separator with their application to mineral dressing
		2nd		Explain the principle of electrostatic separator with their application to mineral dressing
JANUARY	1ST	3rd		Revision on unit 1-5
		4th		Revision on unit 1-5
		2nd		Revision on unit 1-5
	2nd	3rd		Revision on unit 6-10
		4th		Revision on unit 6-10
		2nd		Revision on unit 6-10
	3rd	3rd		Previous year question discussion
		4th		Previous year question discussion
		2nd		Previous year question discussion
	4th	3rd		Previous year question discussion
		4th		Previous year question discussion
		2nd		Previous year question discussion