


LESSON PLAN

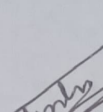
Subject: Metallurgy Mineral Processing			Semester: 3rd semester	Name of the Teaching Faculty: Mr Subrat Kumar Behera
Subject: Mineral Processing Sub code: Th.2			No of days /week class allotted:04/week	Semester from Date:15/09/2022 to 22/12/2022 No of weeks:16
Month	Week	No of periods available	Class Day	Theory topics to be covered
September	1 st	02P	15-09-22	Briefing about the Syllabus
			16-09-22	Describe crushing operations
	2 nd	04P	19-09-22	Explain the type of crushers:Blake and Dodge jaw Crushers Describe capacity and reduction ratio of crusher
			20-09-22	Explain in details gyratory and roll crushers
			21-09-22	Explain the principle of operation of gyratory and roll crushers
			23-09-22	Classify different types of grinding equipment
	3 rd	04P	26-09-22	Classify different types of grinding equipment
			27-09-22	Explain the ball mill operations
			28-09-22	State the difference between open circuit and close circuit grinding
			30-09-22	Revision
October	4 th	02P	06-10-22	State the difference between dry grinding and wet grinding
			07-10-22	Explain the methods of size analysis Explain in details Rotap sieve shaker
	5 th	04P	10-10-22	Describe different types of standard screens with screening techniques Explain the principle of screening Classify types of screening
			11-10-22	Explain the effectiveness, capacity, efficiency of Industrial screens Explain different types of classifiers and their applications
			12-10-22	Explain the effectiveness, capacity, efficiency of Industrial screens Explain different types of classifiers and their applications
			14-10-22	Revision
	6 th	04P	17-10-22	Monthly Test
			18-10-22	Define jigging

November	7 th	04P		Describe the factors affecting stratification in jigs
			19-10-22	Define jigging Describe the factors affecting stratification in jigs
			21-10-22	Define jigging Describe the factors affecting stratification in jigs
			25-10-22	Explain the different industrial process using heavy liquid
			26-10-22	Explain the different industrial process using heavy liquid
			28-10-22	Du - Pont process, chance process
			31-10-22	
	8 th	03P		Du - Pont process, chance process
			01-11-22	
			02-11-22	Define are froth and skin flotation
	9 th	03P	04-11-22	Explain the elementary principle of froth flotation
			07-11-22	Explain the elementary principle of froth flotation
			09-11-22	Explain the practical utility of frother, collector, modifier, activators, depressant (without physic – chemical Principle)
			11-11-22	Explain the practical utility of frother, collector, modifier, activators, depressant (without physic – chemical Principle)
	10 th	04P	14-11-22	Revision
			15-11-22	
			16-11-22	Internal assessment/Class Test
			18-11-22	
	11 th	04P	21-11-22	Explain the practical utility of frother, collector, modifier, activators, depressant (without physic – chemical Principle)
			22-11-22	Explain the practical utility of frother, collector, modifier, activators, depressant (without physic – chemical Principle)
			23-11-22	Explain the practical utility of frother, collector, modifier, activators, depressant (without physic – chemical Principle)
			25-11-22	Explain the practical utility of frother, collector, modifier, activators, depressant (without physic – chemical Principle)
	12 th	03P	28-11-22	Explain the practical utility of frother, collector, modifier, activators, depressant (without physic – chemical Principle)
			29-11-22	Describe the application with practical examples of froth flotation process


December			30-11-22	Describe the application with practical examples of froth flotation process
	13 th	01P	02.12.2022	Monthly Test
	14 th	04P	05-12-22	Describe different types of flotation cells
			06-12-22	Describe different types of flotation cells
			07-12-22	Explain the principles of magnetic and Electrostatic separator with their application to mineral dressing
			09-12-22	
	15 th	04P	12-12-22	Explain the principles of magnetic and Electrostatic separator with their application to mineral dressing
			13-12-22	
			14-12-22	
			16-12-22	
	16 th	04P	19-12-22	Revision & Doubt Clearing Class
			20-12-22	
			21-12-22	


14.9.22

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14.09.2022

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