Discipline	Semester	Name of the Teaching faculty
Mining Engg	3rd	Lilina Priyadarshi Swain
Subject	No. of Days per week class allated	Semester From date :- 15/09/2022 To date :- 21/01/2023
TH-1 (Surface Mining Technology)	04	No. of weeks :- 15
Week	Class / Day	Theory
1st		
Choice of opencast mining	1st	opencast Mining
	2nd	Factors affecting choice of open casting Mining
	3rd	stripping ratio
	4th	overburden / ore ratio
2nd		
	1st	cut off stripping ratio
	2nd	Quarriable limit
	3rd	Favourable conditions for macanized opencast Mines.
	4th	Limitations of large open pits.
3rd		
	1st	Box Cut
	2nd	the location of Box Cut.
Benching	3rd	Bench Parameters (height)
	4th	Bench Parameters (width)

4th		
	1st	Bench parameters (slope)
	2nd	Length of Bench for overburden
	3rd	Length of Bench for ore
Slope stability	4th	Slope stability
5th		
	1st	Factors affecting slope stability
	2nd	-do-
	3rd	Types of slope stability
	4th	-do-
6th		
	1st	causes and prevention of slope stability
Explosive & blasting accessories	2nd	Explosive with constituents, properties and characteristics
	3rd	classification of explosives
	4th	PMS and SMS
7th		
	1st	Permitted explosive
	2nd	sheathed, equivalent sheathed and ultra safe explosive
	3rd	properties of permitted explosives.

	4th	safety fuse, detonating fuse, detonating relay
8th		
	1st	Igniter cord, nonel and trayder
	2nd	Different types of detonators and uses, Advantages of delay detonators
	3rd	types of exploder
	4th	steamming rod, crack detector knife, crimper.
9th		
Drilling	1st	Different Principles and methods of exploratory drilling in surface mining
	2nd	-do-
	3rd	Different types of drill used in open cast mining
	4th	-do-
10th		
	1st	simple construction features of churn drill drills master,
	2nd	Simple construction features of wagon drill and jack hammer
	3rd	D. Th.
	4th	Different types of drill bits in drilling.

11th Blasting practices in Mines	1st	Blasting practices in Mines
	2nd	Preparation of charge
	3rd	-do-
	4th	Procedure of firing shots, direct and inverse initiation
12th		
	1st	Procedure of stemming materials
	2nd	Procedure of water ampoules, Cushion firing
	3rd	Blasting efficiency
	4th	Plaster shooting
13th		
	1st	PoP Shooting
	2nd	Toe blasting
Controlled Blasting Techniques of Per Statutory Provision	3rd	Pre splitting
	4th	Cushion blasting
14th		
	1st	Mubble blasting
	2nd	coyote hole blasting
	3rd	Chamber hole blasting, directional blasting
	4th	Electronics Blasting System (EBS)

15th Magazines

15th Magazines	1st	Magazines
	2nd	Types of Magazines
	3rd	Layout and arrangement of different types of magazines, with their safety features.
	4th	-do-

15/9/22