ORISSA SCHOOL OF MINING ENGINERRING

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DEPARTMENT OF MINING ENGINEERING

Discipline: MiNING Semester: MiNING Semester from Date: 1/10/2021 To Date: 8/1/2022 No of Days/Week class alloted: 4 No of weeks: 16	LESSON PLAN				
Subject: Surface Mining Technology Week Class Day State factors affecting choice of Open casting Mining method. 2nd Define stripping ratio. 3rd Determine overburden/ore ratio. 4th Find out cut off stripping ratio. 1st Determine quarriable limit. 2nd State favorable conditions for mechanized Opencast Mines. 3rd State limitations of large open pits. 4th Define Box cut 1st Determine bench parameters- height, width & slope. 3rd Determine length of bench for overburden and ore 1st Define slope stability. 2nd Factors affecting slope stability. 2nd Types of slope stability. 2nd Define explosive, state constituents of explosives. 4th Explain PMS and SMS. 2nd Define permitted explosive. 3rd Define permitted explosive.			Name of the Teaching faculty: Rajiv Lochan Bal		
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4th CLASS TEST 1, Previous year questions, quiz test		3rd	classify permitted explosive.		
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	1st	Explain sheathed, equivalent sheathed
7th	2nd	ultra safe explosive.
	3rd	State properties of permitted explosives.
	4th	State composition & constructional features of safety fuse,
8th	1st	detonating fuse, detonating relay, igniter cord, nonel and raydet.
	2nd	Describe different types of detonators
	3rd	uses & advantages of delay detonators.
	4th	State different types of exploder.
	1st	construction and safety features, circuit tester.
9th	2nd	Describe stemming rod, crack detector knife, crimper.
	3rd	Describe stemming rod, crack detector knife, crimper.
	4th	Explain different principles and methods of exploratory drilling in surface mining.
	1st	principles and methods of exploratory drilling in surface mining.
	2nd	State different types of drill used in Opencast mining.
10th	3rd	State different types of drill used in Opencast mining.
	4th	Describe simple constructional features of churn drill.
	1st	drills master
	2nd	wagon drill
11th		jack hammer.
	3rd	State D.T.H
	4th	Describe different types of drill bits in drilling
	1st	Describe different types of drill bits in drilling
12th	2nd	
	3rd	Describe preparation of charge. CLASS TEST 2, Previous year questions, quiz
	4th	
13th	1st	State procedure of firing shots. direct and inverse initiation.
	2nd	stemming materials.
	3rd	water ampoules, cushion firing.
	4th	
14th	1st	Define blasting efficiency. State and describe plaster shooting and pop shooting, toe blasting.
	2nd	State and describe plaster shooting and pop shooting, too blasting. State and describe plaster shooting and pop shooting, too blasting.
	3rd 4th	State and describe pre-splitting,
15th	1st	cushion blasting,
	2nd	muffle blasting, coyote hole blasting,
	2110	mume blasting, coyote note blasting)

	3rd	chambered hole blasting, directional blasting,
	4th	Electronics Blasting System (EBS).
16th	1st	Describe layout and arrangement of different types of magazines
	2nd	state their safety features.
	3rd	previous year question disscussion
	4th	Previuos year questions, quiz

Prepared By-Rajiv Lochan Bal Lect.(Mining) OSME,Keonjhar

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