

Dicipline:	Mining	Semester:	6th	Name of the Teaching Faculty	Dharmasish Behera
Subject:	Mine machinery-2	No of Days/Week Class Allotted:		Semester From date:	10/2/22 To date 18/6/22
				No. of Weeks:	

WEEK	Class Day	Theory Topics
From 14-03-22 to 19-03-22	1st	Introduction of underground Machines.
	2nd	Electric coal drill and it's operation process.
	3rd	principle and uses of electric coal drill
	4th	Types of drill rods and drill bits used in electric coal drill
	5th	
From 21-03-22 to 26-03-22	1st	Basics constructional features of scraper loader.
	2nd	Basics constructional features of LHD
	3rd	Basics constructional features of SDL
	4th	Basics constructional features of Jack hammer drill.
	5th	
From 27-03-22 to 02/04/22	1st	Basics constructional features And operations of Airleg rockdrill.
	2nd	Describe basic constructional features of gathering arm loader
	3rd	Describe basic constructional features and operation principle of road header
	4th	Describe basic constructional features and operation principle of road header.
	5th	

WEEK	Class Day	Theory Topics
4th	1st	Describe basic constructional features and operation principle shearer loader.
	2nd	Describe basic constructional features and operation principle shearer loader.
	3rd	complete revision of the underground face machineries.
	4th	Introduction to open cast machineries.
	5th	
5th	1st	Introduction to basic constructional features of surface miner.
	2nd	Describe basic constructional features of dragline.
	3rd	Describe basic constructional features of Sovel.
	4th	Describe basic constructional features of Sovel (ROPE SHOVEL)
	5th	
6th	1st	unique feature of different types of shovels and it's application.
	2nd	Describe basic constructional features of backhoe.
	3rd	Describe basic constructional features of bucket wheel excavator.
	4th	Describe basic constructional features of dumper.
	5th	

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Discipline:		Semester: 6th	Name of the Teaching Faculty Dharmasish Behera	
Subject:		No of Days/Week Class Allotted: _____	Semester From date: _____ To _____ date _____	No. of Weeks: _____
WEEK	Class Day	Theory Topics		
7th	1st	Describe basic constructional features of dozer.		
	2nd	Describe basic constructional features of scraper.		
	3rd	Describe basic constructional features of road grader.		
	4th	Introduction to mine pump.		
	5th			
8th	1st	Classify mine pumps.		
	2nd	Describe constructional features of ramp pump		
	3rd	Working principle of ramp pump and it's uses.		
	4th	Describe constructional features of centrifugal pump.		
	5th			
9th	1st	Working principle of centrifugal pump and it's uses.		
	2nd	Describe constructional features of turbine pump.		
	3rd	Working principle of turbine pump and it's uses.		
	4th	Explain balancing the axial thrust of turbine pumps.		
	5th			

WEEK	Class Day	Theory Topics
10th	1st	Explain balancing the axial thrust of turbine pumps.
	2nd	Draw characteristic curves for turbine pumps.
	3rd	Solve numerical problems on centrifugal and turbine pumps.
	4th	Solve numerical problems on centrifugal and turbine pumps.
	5th	
11th	1st	Describe constructional features and working principle of roto pump (Screw pump)
	2nd	— DO —
	3rd	Describe constructional features sinking pump
	4th	Use of roto pump (Screw pump)
	5th	
12th	1st	Working principle of sinking pump
	2nd	State procedure of suspension in shaft.
	3rd	State procedure of suspension in shaft.
	4th	— DO —
	5th	

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Discipline:		Semester: <u>6th</u>	Name of the Teaching Faculty <u>Dheerajkish Behera</u>	
Subject:		No of Days/Week Class Allotted: <u>5</u>	Semester From date: _____ To _____ date _____	No. of Weeks:
WEEK	Class Day	Theory Topics		
13 th	1st	Introduction to Bore hole pump		
	2nd	Describe constructional features of Bore hole pump.		
	3rd	Working of bore hole pump		
	4th	State installation of bore hole pump		
	5th	State installation of bore hole pump		
14 th	1st	_____ DO _____		
	2nd	Introduction to Bore hole pump		
	3rd	Describe constructional features of Bore hole pump.		
	4th	Working of bore hole pump		
	5th			
15 th	1st	State Installation of bore hole pump		
	2nd	_____ DO _____		
	3rd	State types of pipe and Valves used in mines		
	4th	Describe constructional features of various types of Valves.		
	5th			

WEEK	Class Day	Theory Topics
16th	1st	State and describe different types of pipe Joints.
	2nd	Describe support of laying main pipe is shaft.
	3rd	Discuss the pipe line layout.
	4th	
	5th	
	1st	
	2nd	
	3rd	
	4th	
	5th	
	1st	
	2nd	
	3rd	
	4th	
	5th	