

Dicipline:	MINING	Semester: 6th	Name of the Teaching Faculty:	
Subject: Mine Machinery -II		No of Days/Week Class Allotted: _____	Semester From date: _____ To date _____	No.of Weeks:
WEEK	Class Day	Theory Topics		
1	1st	Introductiob to Underground face machineries.		
	2nd	Introduction to Electric coal dril.		
	3rd	Describe constructional features, operation of electric coal drill.		
	4th	Describe constructional features, operation of electric coal drill.		
	5th			
2	1st	Description to principle & use of electric coal drill.		
	2nd	Description to types of drill rods & drill bits used in electric coal drill.		
	3rd	Description of basic constructional features of gathering arm loader.		
	4th	Description of basic constructional features of scrapper loader.		
	5th			
3	1st	Description of basic constructional features of side discharge loader.		
	2nd	Description of basic constructional features of load & haul loader.		
	3rd	Description of basic constructional features & operation principle of Jack hammer drill.		
	4th	Description of basic constructional features & operation principle of air leg rock drill.		
	5th			

WEEK	Class Day	Theory Topics
4	1st	Description of basic constructional features & operation principle of road header.
	2nd	Description of basic constructional features & operation principle of shearer loader.
	3rd	Introduction to heavy earth moving machinery and opencast machinery.
	4th	Introduction to heavy earth moving machinery and opencast machinery.
	5th	
5	1st	Description to basic constructional features of dragline & its application.
	2nd	Description to basic constructional features of shovel & its application.
	3rd	Description to basic constructional features of backhoe & its application.
	4th	Description to basic constructional features of bucket wheel excavator(BWE) & its application.
	5th	
6	1st	Description to basic constructional features of surface miner & its application
	2nd	Description to basic constructional features of dumper & its application.
	3rd	Description to basic constructional features of dozer & its application.
	4th	Description to basic constructional features of scrapper & its application.
	5th	

WEEK	Class Day	Theory Topics
7	1st	Description to basic constructional features of road grader & its application.
	2nd	Description to basic constructional features of surface miner & its application
	3rd	Introduction to mine pumps.
	4th	Classification to mine pumps.
	5th	
8	1st	Description to constructional features, working & use of ram pumps.
	2nd	Description to constructional features, working & use of ram pumps.
	3rd	Introduction to Centrifugal & turbine pumps.
	4th	Description to constructional features of centrifugal & turbine pumps.
	5th	
9	1st	Description to constructional features of centrifugal & turbine pumps.
	2nd	Principle of centrifugal & turbine pumps & its applicability.
	3rd	Principle of centrifugal & turbine pumps & its applicability.
	4th	Explanation to balancing the axial thrust of turbine pumps.
	5th	

WEEK	Class Day	Theory Topics
10	1st	Explanation to balancing the axial thrust of turbine pumps.
	2nd	Sketching of characteristic curves for turbine pumps.
	3rd	Sketching of characteristic curves for turbine pumps.
	4th	Solving numerical problems on centrifugal & turbine pumps.
	5th	
11	1st	Solving numerical problems on centrifugal & turbine pumps.
	2nd	Solving numerical problems on centrifugal & turbine pumps.
	3rd	Describe constructional features and working principle & use of roto pump (screw pump)
	4th	Describe constructional features and working principle & use of roto pump (screw pump)
	5th	
12	1st	Description to constructional features & working principle of sinking pump.
	2nd	Description to constructional features & working principle of sinking pump.
	3rd	Explanation to procedure of suspension in shaft.
	4th	Explanation to procedure of suspension in shaft.
	5th	

WEEK	Class Day	Theory Topics
13	1st	Introduction to Bore hole pump.
	2nd	Description to constructional features of bore hole pump.
	3rd	Description to working principles of bore hole pump.
	4th	Installation of bore hole pump.
	5th	
14	1st	Introduction to types of pipe & valves used in Mines.
	2nd	Description to constructional features of various type of valves.
	3rd	Description to different types of pipe joints.
	4th	Description to support of laying main pipe in shaft.
	5th	
15	1st	Description to support of laying main pipe in shaft & pipe line lay out.
	2nd	
	3rd	
	4th	
	5th	