

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline:	Semester:	Name of the Teaching Faculty:
MNE	6 th sem	N.F
Subject:	No of Days/per week class allotted: 4	Semester from Date: 16-01-24 to Date: 26-04-24
Mine Machinery-II	Week	No of Weeks:
	Class Day	Theory/Practical Topics
1st	1st	Basic details about ulg mines and method
	2nd	-
	3rd	Describe and explanation of Electric Drill Rod
	4th	Principal, feature, operation & use of drill
	5th	rod used in coal mines.
2nd	1st	Type of drill rod & bits used in electric
	2nd	coal drill.
	3rd	Basic constructional features of Loaders
	4th	Types of loader use in coal ulg mine
	5th	Arm Loader, Scraper, SDL, Haul loader
3rd	1st	-do-
	2nd	
	3rd	-do-
	4th	Describe basic constructional feature
	5th	& operation principle of jack hammer
4th	1st	& air leg rock drill
	2nd	
	3rd	-do-
	4th	Basic constructional feature of road header
	5th	Shearer loader, its operation etc.
5th	1st	Basic concept of Opencast Mine Machinery
	2nd	
	3rd	Surface Miner brief explanation uses,
	4th	operation, constructional feature etc.
	5th	Dragline concept

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16/1/24
Principal

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Discipline:	Semester:	Name of the Teaching Faculty:
Subject:	No of Days/per week class allotted: 4	Semester from Date: 18-01-24 to Date: 28-04-24 No of Weeks:
Week	Class Day	Theory/Practical Topics
6th 1st	1st	Shovel, Type of shovel concept everything
	2nd	
	3rd	Bucket Wheel Excavator concept clear
	4th	Dumper concept, diagram, advantages etc.
	5th	Dozer concept "
7th 2nd	1st	Scraper concept "
	2nd	
	3rd	Road Grader concept "
	4th	Doubt class for the topic cover U/G
	5th	Face machineries
3rd 8th	1st	Doubt class for HEMM use in opencast mine.
	2nd	
	3rd	New topic started by the basic concept
	4th	of pumps used in mines both U/G & O/L
	5th	Classify, describe constructional feature
9th 4th	1st	working uses of various pump.
	2nd	
	3rd	Ram Pump
	4th	Centrifugal Pump
	5th	Turbine Pump
10th 5th	1st	State principle of centrifugal & turbine
	2nd	
	3rd	pumps and its applicability.
	4th	Explains about how to balancing the axial
	5th	thrust of turbine pumps etc.

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Shakir 16/11/24
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MNE	6 th	
Subject:	No of Days/per week class allotted: 4	Semester from Date: 16-01-24 to Date: 26-04-24
Week	Class Day	Theory/Practical Topics
11 th 1st	1st	Characteristic curve for turbine pumps
	2nd	
	3rd	Describe constructional feature and working, uses of roto pump (screw pump)
	4th	
	5th	Sinking Pump
12 th 2nd	1st	Explanation procedure of suspension in shaft
	2nd	
	3rd	Doubt class taken for any problem face for the ventilation and mine pump etc.
	4th	
	5th	Boze Hole Pump describe constructional
13 th 3rd	1st	feature and working of boze hole pump
	2nd	
	3rd	-do-
	4th	State installation of boze hole pump
	5th	-do-
14 th 4th	1st	Pipes & Valves new topic started which
	2nd	
	3rd	cover, type of pipes, valve used in mines.
	4th	Constructional feature of various type of valve
	5th	State & describe different type of pipes
15 th 5th	1st	joins, Discuss Pipe line layout
	2nd	
	3rd	-do-
	4th	Describe support of laying main pipe in shaft.
	5th	

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