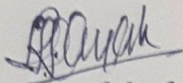


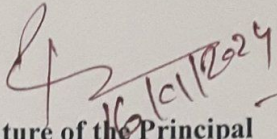
Academic Lesson Plan of Summer 2024

Department : MINING ENGG.	Semester : 6TH	Name of the Teaching Faculty : RUDRA MOHAN NAYAK.
Subject : MATERIAL HANDLING & LOGISTICS	No. of Days/per week class allotted : 4Period/week	Semester from : 16TH JANARY 2024
		No of Weeks : 15 Weeks
		Topic to be covered :
WEEK	DAYS	TOPIC
1st Week	1st	Introduction to surface and underground haulage system.
	2nd	Introduction to surface and underground haulage system.
	3rd	Classify Underground and Surface Haulage System.
	4th	Classify Underground and Surface Haulage System.
2nd Week	1st	State factors affecting design of a haulage system.
	2nd	State factors affecting design of a haulage system.
	3rd	Findout the capacity of a haulage system in a given production.
	4th	Findout the capacity of a haulage system in a given production.
3rd Week	1st	Classification of Conveyors.
	2nd	State factors affecting design of a Belt conveyor, Cable belt conveyor and steel cord conveyor.
	3rd	State factors affecting design of a Belt conveyor, Cable belt conveyor and steel cord conveyor.
	4th	State factors affecting design of a Belt conveyor, Cable belt conveyor and steel cord conveyor.
4th Week	1st	State factors affecting design of a Belt conveyor, Cable belt conveyor and steel cord conveyor.
	2nd	Describe constructional features of Belt Conveyor and Cable Belt Conveyor.
	3rd	Class Test - I
	4th	Describe the formula to calculate Drive Capacity of Belt Conveyor and Cable Belt Conveyor.
5th Week	1st	Describe the formula to calculate Drive Capacity of Belt Conveyor and Cable Belt Conveyor.
	2nd	State different types of Locomotive Haulage.
	3rd	State different types of Locomotive Haulage.
	4th	Describe the Basic constructional features of Trolley Wire, Compressed Wire, Diesel and Battery Locomotives.
6th Week	1st	Describe the Basic constructional features of Trolley Wire, Compressed Wire, Diesel and Battery Locomotives.
	2nd	Describe the Basic constructional features of Trolley Wire, Compressed Wire, Diesel and Battery Locomotives.
	3rd	State applicability, Merit and Demerits of Locomotives.
	4th	State applicability, Merit and Demerits of Locomotives.
	1st	Describe Safety Devices of Diesel Locomotive including Flame Trap around Exhaust Conditioner Box.

WEEK	DAYS	TOPIC
7th Week	2nd	Describe Safety Devices of Diesel Locomotive including Flame Trap around Exhaust Conditioner Box.
	3rd	Describe Safety Devices of Diesel Locomotive including Flame Trap around Exhaust Conditioner Box.
	4th	Solve Nuemeral problems.
8th Week	1st	Solve Nuemeral problems.
	2nd	Classify Aerial Ropeways.
	3rd	State applicability of Aerial Ropeways.
	4th	Describe the constructional features of Bicable and Twin Cable Ropeways.
9th Week	1st	Describe loading, unloading and angle station Bicable and Thin cable Ropeways.
	2nd	Describe loading, unloading and angle station Bicable and Thin cable Ropeways.
	3rd	Define Hydrollic Transportation
	4th	Design the Hydrollic Transportation System.
10th Week	1st	Discuss theory of Hydrollic Transportation of solid in Mines. (Without Derivation)
	2nd	State applicability, Advantages and Disadvantages of Hydrollic Transportation in Mines.
	3rd	State applicability, Advantages and Disadvantages of Hydrollic Transportation in Mines.
	4th	State capability of Spiralchute.
11th Week	1st	State capability of Spiralchute.
	2nd	State applicability , Advantages and Disadvantages of Hydrollic Transportation in Mines.
	3rd	State applicability , Advantages and Disadvantages of Hydrollic Transportation in Mines.
	4th	State capability of Spiralchute.
12th Week	1st	Explain Working Principle of Spiralchute.
	2nd	Describe constructional features of Spiralchute.
	3rd	State installation of Borehole Pump.
	4th	Explain Flow of Material in Bins and Bunkers.
13th Week	1st	Explain Flow of Material in Bins and Bunkers.
	2nd	Design Bunkers and Bins For a given Productions.
	3rd	Design Bunkers and Bins For a given Productions.
	4th	Discuss the Pipeline Layout.
14th Week	1st	Discuss the Pipeline Layout.
	2nd	INTERNAL
	3rd	Previous year Question Discussion.

WEEK	DAYS	TOPIC
	4th	Previous year Question Discussion.
15th Week	1st	Revision and Doubt clearing Class.
	2nd	Revision and Doubt clearing Class.
	3rd	Revision and Doubt clearing Class.
	4th	Revision and Doubt clearing Class.


Signature of the faculty


Signature of the Principal