

Discipline:	Mining	Semester:	3 th	Name of the Teaching Faculty: Debashish Pradhan	
Subject:	Mine Machinery - I	No of Days/Week Class Allotted:	_____	Semester From date: 13/07/22 To date: 18/10/23	No. of Weeks: _____
WEEK	Class Day	Theory Topics			
From 13/09/22 to 18/09/22	1st	Working ropes, types of wire ropes used in mines			
	2nd	Constructional features of wire ropes & lay of wire ropes.			
	3rd				
	4th				
	5th				
From 19/09/22 to 24/09/22	1st	Factors influencing the F.O.S, Nominal factors of safety of wire ropes.			
	2nd	Efficiency of rope construction.			
	3rd	Description of safe factors, actual factor of safety of wire ropes.			
	4th	Description of cross sectional area rope.			
	5th				
From 26/09/22 to 01/10/22	1st	Factors affecting deterioration of rope.			
	2nd	Description care & maintenance of rope.			
	3rd	Testing & examination of wire rope.			
	4th	Procedure of splicing of wire rope.			
	5th				

WEEK	Class Day	Theory Topics
From 10/10/22 to 15/10/22	1st	Description of rope cap & mechanical winching & reeving
	2nd	Rope handling
	3rd	Types of rope handling
	4th	Transition in mind by rope handling
	5th	
From 17/10/22 to 20/10/22	1st	Direct rope handling, single drum direct rope handling, double drum direct rope handling.
	2nd	Man & tail rope handling, endless rope handling.
	3rd	Under rope endless rope handling, over rope endless rope handling.
	4th	Cranway rope handling
	5th	
From 24/10/22 to 29/10/22	1st	Safety devices on rope handling roads ways.
	2nd	Step block & butters, Backstay arbor
	3rd	Monkey catch or back catch, runway switch
	4th	Brake war winch, Jall hook, man hole, tub handle, wheel, signal & Teli Communicate
	5th	

Discipline:		Semester:	Name of the Teaching Faculty:	
Subject:		No of Days/Week Class Allotted: _____	Semester From date: _____ To date _____	No. of Weeks:
WEEK	Class Day	Theory Topics		
From 01/11/22 to 05/11/22	1st	Different types of clutches & couplings.		
	2nd	Jaw couplings, sleeve coupling, Tire coupling.		
	3rd	Disc coupling, Diaphragm coupling, gear coupling, Grid coupling, roller chain coupling.		
	4th	Introduction to Headgear		
	5th			
From 07/11/22 to 12/11/22	1st	Steel Headgear, concrete Headgear		
	2nd	Drum hoist & Friction hoist (Koepe), Height of Headgear.		
	3rd	Design of Headgear, constructional features of Headgear pulley.		
	4th	Angle fleet (Description, Deviation)		
	5th			
From 14/11/22 to 19/11/22	1st	Cage and shaft fittings (Introduction)		
	2nd	Cage suspension gear, detaching hooks & its function		
	3rd	Safety catch at headgear & KEPS.		
	4th	Describe types of guide		
	5th			

WEEK	Class Day	Theory Topics
From 21/11/22 to 26/11/22	1st	Rigid guide, Flexible shoes
	2nd	guide rope suspension & tensioning arrangement.
	3rd	Drum winder definitions, How it works
	4th	Types of Drum winder (cylindrical drum)
	5th	
From 28/11/22 to 03/12/22	1st	Conical drum, Cylindrical conical drum, Bd-cylindrical conical drum.
	2nd	Types of winding brake, mechanical Brakes.
	3rd	Centre suspended calliper post Brake
	4th	Types of safety devices on winding system.
	5th	
From 05/12/22 to 10/12/22	1st	Friction winding definition, principle
	2nd	Constructional features of ground-mounted & tower-mounted koepe winder.
	3rd	Advantages & disadvantages of koepe winder.
	4th	multirope system of koepe winding
	5th	

Discipline:		Semester:	Name of the Teaching Faculty:	
Subject:	No of Days/Week Class Allotted: _____	Semester From date: _____ To date: _____		No. of Weeks:
WEEK	Class Day	Theory Topics		
From 12/12/22 to 17/12/22	1st	Introduction to skip winding		
	2nd	Constructional features bottom discharge skip		
	3rd	Constructional features TOP discharge skip		
	4th	Compare skip winding cage winding		
	5th			
From 19/12/22 to 22/12/22	1st	Revise class.		
	2nd	Revise class.		
	3rd			
	4th			
	5th			
From 2/01/23 to 7/01/23	1st	Revise class		
	2nd	Revise class.		
	3rd	Revise class		
	4th	Revise class.		
	5th			

WEEK	Class Day	Theory Topics
From 9/01/23 - 19/01/23	1st	Revise class
	2nd	Revise class
	3rd	Revise class
	4th	
	5th	
From 16/01/23 - 20/01/23	1st	Doubt clear class
	2nd	Doubt clear class.
	3rd	Doubt clear class.
	4th	
	5th	DS P
	1st	
	2nd	
	3rd	
	4th	
	5th	