THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION:- MNA

NAME OF THE FACULTY: (1) ER. DILLIP KUMAR DEHURY (H.O.D., MINING ENGG., (2) ER. SWAPNAJIT RAY (LECT. IN MINING ENGG.)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: SURFACE MINING TECHNOLOGY (TH-1)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Choice of Opencast Mining	10		
	State factors affecting choice of Open casting Mining method.	1	AUGUST	D+ 1.8.2023 D+-3.8.2023
	Determine overburden/ore ratio	1		Dr - 4-8-2023
	Find out cut off stripping ratio	1		D+- 7. 8. 2023
	Determine quarriable limit	1		Dt - 8. 8. 2023 Dt - 10. 8. 2023
1	State favorable conditions for mechanized Opencast Mines	1		04 - 11.8.2023 04 - 14.8-2023
	Advantages of open cast mines	1		Dt - 17.8.2023
	Disadvantages of open cast mines	1		Dt - 18,8-2023
	State limitations of large open pits	1		Ot - 21.8.2023
	Define Box cut and determine the location of Box cut	1		D+ - 22 - 8. 2023
	Benching	5		
	Bench parameters	1		D1 - 24. 8.2023
2	Height,width and slope of bench	2		V4-25.8.2023 D1-28.8.2023
	Determination of length of bench for overburden	1		b1 · 2a. 8 - 2023
	Determination of length of bench for ore	1		b+- 31.8 2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Slope Stability	6		
3	Factors affecting slope stability	1	SEPTEMBER	D+- 1. 9. 2023
	Types of slope stability	1		Dt - 4.9.2023
	Causes of slope stability	2		Dt - 5.9.2023 Dt - 7.9.2023
	Prevention of slope stability	2		D1. 8.9.2023 D1-11.9.2023
	Explosive and blasting accessories	11		
	Define explosive, state constituents of explosives, properties & characteristics of explosives.	1		D4 - 12.9.2023 DF 14.9.2023
	Classify explosives, state composition and uses of explosives	1		Dt - 15.9.2023
	Explain PMS and SMS	1		D+- 21. a. 2023
	Define permitted explosive and classify permitted explosive	1		D+- 22.9.2023 D+- 25.9.2023
4	Explain sheathed, equivalent sheathed and ultra safe explosive	1		D+ - 26.9-2023
	State properties of permitted explosives	1		28-9-2023
	State composition & constructional features of safety fuse, detonating fuse	1	OCTOBER	D1-3.10.2023
	State composition & constructional features detonating relay, igniter cord, nonel and raydet	1		Dt - 5 - 10 · 2023
	Describe different types of detonators and uses, state advantages of delay detonators	1		D4 - 9.10.2013
	State different types of exploder, its construction and safety features, circuit tester	1		D+ - 10. 20.2023
	Describe stemming rod, crack detector knife, crimper	1		D4- 12.10:2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Drilling	8		
	Explain different principles and methods of exploratory drilling in surface mining	2		D4 - 13 -10.2023 D4 - 16 -10.2023
5	State different types of drill used in Opencast mining	1	-	DH-17-10.2023
5	Describe simple constructional features of churn drill, drills master, wagon drill and jack hammer	2		D+. 19.10.2023 D+. 20.10.2023
	State D.T.H.	1		D+ - 26-10.2023
	Describe different types of drill bits in drilling	2		D1 - 27.10.2023 D1.30.10.2023
	Blasting Practices in Mines	10		
	Describe preparation of charge	1		31.10.2023
	State procedure of firing shots	1	YOVEMBER	· D1 - 2 · 11 · 20 2 3 D1 · 3 · 11 · 20 2 3
	Direct and inverse initiation	1		104-6-11.2023 Dt-7-11.2023
	Stemming materials	1		nt-9-11.2023
6	Water ampoules	1		D+. 10-11.2023
	Cushion firing	1		D+- 13.11.2023
	Define blasting efficiency	1		D+ - 14 · 11.2023
	State and describe plaster shooting	1	== =====	0+ 16.11.2023
	Pop shooting	1		01 - 17 . 11. 2023
	Toe blasting	1		Dt - 20 · 11. 2023
	Controlled Blasting Techniques as per Statutory Provision	6		
7	State and describe pre-splitting	1		O1 - 21 · 11 - 20 23
	Cushion blasting	1		D+- 23 · 11. 2023
	Muffle blasting	1		0+ 251.11.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Coyote hole blasting	1		Dt - 28.11-2023
	Chambered hole blasting	1		D4 - 30 · 11 · 2023
	Directional blasting, Electronics Blasting System (EBS)	1	DECEMBER	101-11.12.2023
	Magazines	4		
	Describe layout of magazine	1		Dt - 4.12.2023
8	Arrangement of magazine	1		D+- 5-11.2023
	Different types of magazines	1		04-7.12.2013
	State their safety feature	1		0+-8.12.2023

SIGNATURE OF THE H.O.D.

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P.C.I.E.T., CHHENDIPADA

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Purna Chandra Institute of
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CHHENDIPADA, ANGUL

THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION:- MNA

NAME OF THE FACULTY: (1) ER. SUNIL KUMAR SAHU, (2) ER. PRANAYA KUMAR BEHERA (LECT. IN MINING)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: MINE SURVEY - I (TH-2)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Chain Survey	10		
	Survey conventional signs, abbreviation used.standards of lining, inking and coloring.	1	August	D+ - 1.8.2023 D+ - 3.8.2023
	Se ection of scales used.principle of chain surveying	1		24 - 4.8.2023
	Instruments used and checking their correctness,ranging and chaining of a line	1		04-5.8.2023 D+-8.8.2023
	Errors in chaining,obstruction while chaining	1		D4. 10.8.2023
1	Chaining along a sloping ground	1		D+- 11.8.2023
	Use of optical square and line range and checking optical square for correctness	1		D+- 17.8.2023
	Offsets and their measurements	1		01-18-8.2023
	Reference sketches of stations	1		9t- 19-8,2023
	Procedure of chain surveying	1		04 22.8.2023
	Field booking and plotting of chain survey.	1		D+. 24.8.2023
	Compass Survey	8		
	Prismatic compass, its adjustments and use,true meridians, magnetic meridian, grid line meridian and	1		D+ - 25 - 8 - 2023
	arbitrary meridian			17+- 29.8.2023
2	W.C.B. and Q.B. and conversion from one to other	1		D1-31-8-2023
	Fore and back bearing and their conversion	1	SEPTEMBER	
	Compute angles from bearing and bearing angles	1		Ot-2-9.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Local alteration and necessary correction to the bearing	1		D4.5.9.2023
	Closed and open compass surveying and its plotting	1		24.7.9.2023
	Procedure of field booking in compass and chain traverses, adjustment of closing error in compass traversing	1		D+-8-9.2023 D+-12.9.2023
	Surveyor compass(miner's dial),its adjustment and use, Compare prismatic compass with surveyor compass.	1		0+. 14.9.2023 10+. 15.9.2023
	Plane Table Survey	8		
	Fundamentals of Plane Table Survey	2		D1-17.9.2023 D1.21.9.2023
3	Two point problems	2		Dt - 22 - 9.2023
	Three point problems and its solution by tracing paper method	2		Dt-26.9.2013 Dt-28.9.2023
	Advantages and disadvantages of plane table	1		D+ 30.9.2023
	Computation of Areas	8		
	Methods of determining areas.	1	OCTO BER	D+-3.10.2023
	Find out areas from offset to a base line using	1		D+ · 5 · (0.2023
	Mid ordinate rule	1		D+· 6.10.2023
4	Average ordinate rule	1		D+ 7.10.2023
	Trapezoidal rule	1		04 - 16.10 - 2023
	Simpson's rule	1		04-12-10.2023
	Computer area by Planimeter and from graph paper.	2		04-13.10.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Leveling	10		
	benchmark M.S.L. Dumpy level	2		D+.17.10.2023 D4.19.10.2023
	Adjust dumpy level, modern levels (Auto Level & etc.), and precise staff.	2		D+. 20.10.2023 Nr. 26.10.2023
5	methods of leveling- Rise & fall method, height of instrument	2		DL 27.10.2023 D4-31.10.2023
	Errors in ordinary leveling	2	NOVEMBER	D+-2.11.2023 D- 3.11.2023
	reciprocal leveling, subsidence leveling, setting out gradient, trigonometric leveling, geometrical leveling, and physical leveling.	2		D+ 4.11.2023 O+- 7.11.2023
	Calculation of Ore Reserves	8		
	Classify reserves	2		74.9.11.2023 Dt-10.11.2023
6	Evaluate reserves by exploratory	3		D+ 14.11.2023 D4-16.11.2023
	primary ore reserve by material balance method & decline curve method	3		Dt - 17 · 11 · 2023 Dt - 18 · 11 · 2023 Dt - 23 · 11 · 2023
	Theodolite	8		
	Temporary and permanent adjustment of Theodolite	2		5+-24.11.2023 Dt-28.11.2023
7	Principles of operation & describe different parts	2	DECEMBER	9+.30.11.2023 D+-1.12.2023
1	Measure Horizontal & Vertical angles	2		0+-2.12-2023 D4-5-12-2023
	Setting of the instrument	1		D+-7.12.2023
	Traversing with Theodolite.	1		D+. 8.12.2023

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION:-MNA

NAME OF THE FACULTY: (1) ER. UDAYA BISWANATH PADHAN,

(2) ER. AMARENDRA (LECT. IN MINING)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: MINE GEOLOGY - I (TH-3)

CLASS AL	LOTTED /WEEK:	04 PERIODS
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SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Physical Geology	15		
	Weathering	2	AUGUST	D1.3.8.2023 D1-4.8.2023
	Erosion	1		V+ - 5 . 8. 2023
	Erosional land forms by wind	2		17+-7.8.2023 17-10.8.2023
	Depositional land forms by wind	1		Ut-11.8.2023
1	Erosional features of river	2		D+-14-8.2023 Dt-17-8.2023
	Depositional features of river	1		D+-18-8.2023
	Differentiate between glacier and iceberg	1		10-1-19.8-2023
	Erosional features of glacier	2		04-21.8.2023 04-24.8.2023
	Depositional features made by glacier	2		D+. 25.8.2023 D1 - 28.8.2023
	Moraines and its types	1		0+ 31.8.2023
	Petrology	12		
	Define a Rock. Distinguish between a rock and a mineral.	2	SEPAEMBER	D+-1.9.2023 D+-2.9.2023
	Define Igneous, Sedimentary and Metamorphic rocks.	2		D4 4.9.2023 D4-7.9.2023
2	Textures of igneous rock	2		04-8-9.2023 04-11-9.2023
	Structures of igneous rock	2		D+14.9.2023 D+-15.9.2023
	Structures of sedimentary rock with sketch	2		OH 16-9.2023 Dt-18-9.2023
	Various structures in metamorphic rock	2		D+-21-9.2023 D+ 29-9.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Structural Geology	6		
	Define Dip. Distinguish between true dip and apparent dip	1		D1.25-9.2023 D1.28-9.2023 D1-30-9.2023
	Define strike	1	BETDBER	
3	Define folds, Classify folds and describe them	1		pt- 6.10.2073
	Define faults. Describe the various types of fault	1		0+-7.10.2023
	Define unconformity. Describe the various type of unconformity with neat sketches	1		01-9-10-2013 D+-12-10-2013
	Define joints. Describe various joints	1		D+ - 13-10.2023
	Element of Crystallography	12		
	Define a crystal	1		D+ - 16.10.2023 D+ 18.10.2022
4	Explain Miller's indices	4		D1 - 20.10.2023 D1-28-10.2023
	Describe the Symmetry elements and forms present in the normal class of isometric system	7	LOJEMBER	nd 27 (n 2000 h) 200 (A 200
	Elements of Mineralogy	15		
	Define a mineral	1		D1 - 4. 11. 2023
	Enumerate and describe the physical properties of minerals	2		D1-6-11. 2023 D1-9-11. 2023
	Describe various optical properties of minerals	2		DI. 10.11.2023 DI.13.11.2023
5	Explain briefly the silicate structures along with diagrams	2		DI-17.11.2023 Dt 18.11.2023
	Mineralogy and physical properties of olivine	2		D4. 23.11.2023 Dt 24.11.2023
	Pyroxene	2	OCCEMBER	DH-30.11.2023 DH-1.12.2023
	Quartz	2		DH-2.12.2023 DH-4.12.2023
	Feldspar	2		Dt-7.12.2023 D1-8-12-2023

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION:- MNA

NAME OF THE FACULTY: (1) ER. DEWAN KUMAR SAHU, (2) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG.)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: MECHANICAL OPERATION IN MINES (TH-4)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Strength of Materials and Power Transmission	20		
	Define Elasticity,Hook's Law	1	AUGUST	D-1 - 1 - 8 - 2023
	Limit of Proportionality.	1		p.1. 4-8-2023
	Young's Modulus	1		04. 5-8.2013
	Factor of safety. Lateral strain and Poisson's ratio	1		DF 7-8.2023
	Stress-strain curve for ductile materials	1		D+ 8 -8. 2073
	Effect of axial load on bar of Uniform section	1		D+ 11-8.2023
	Effect of axial load on bar of Variable section	1		DL 14.8.2013
1	Numerical problems on Uniform section, Variable section	1		Dt - 18 - 8. 2023
	Bending moment and shear force	1		D+ 19 -8.2023
	Types of beam and types of loading	1		D+ 21 - 8.2023
	Explain shear force diagram and bending moment diagram for Cantilever with concentrated loading	1		VH 22-8.2023
	Cantilever with U.D.I. over whole span	1		D'- 25 · 8 · 2023
	Simply supported beam with concentration loading	1		O+ 28 · 8 · 2023
	Simply supported beam with U.D.I. over whole span	1		D+2a -8. 2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	State bending formula	1	SEPTEMBER	04. 1.9.2023
	Define section modules,Find out section modules for beam section of simple cases	1		D+- 2-9.2023
	Define torsion and state its effects,State application of torsion formula	1		0+ 4.9.2023
	working of Shaft couplings such as hydraulic and magnetic couplings,Belt, chain and rope Drive,Simple and compound gear train,Torque converters	1		DI- 5-9.2023
	State function of flywheel and governors	1		Di- 8-9.2023
	Explain working of watt, purler and proel governors	1		Dt- 11 - 9. 2023
	Elements of Hydraulics	15		
	State various fluid properties, Define pressure of fluid and pressure head	1	7.02 	D4-12.9.2023
	State and explain working principle of various pressure measuring devices such as Pieccometer tube	1		V+ 15.9,2023
	State and explain continuity equation	1		Pt- 16-9.2023
	State and explain Bernoulli's theorem	1		D4- 18.9.2023
•	Explain working of venturimeter	1		0+ 22 .9.2023
2	Solve numerical problems on above	1		DL 25-9.2023
	Define and classify orifices	1		D+ 26.9.2023
	State the formula and discharge for rectangular orifices and solve problems	1		D+ 30-9.2023
	Define and differentiate between orifice and notch.	1	OGOBSK	O+ 3 .10.2023
	Classify notches, State formula for discharge through notches & solve problem on above	1		DL 6.(0.2023
	State and explain laws of fluid friction	1		04 7.10:2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	State and explain loss of head due to friction (Darcy weisbach formula	1		D+ 9 · 10 · 20 ? 3
	Explain hydraulic gradient and energy gradient.	1		D+ 10.10.2073
	Compressed Air	15	-	
	Explain introduction of compressed air as a power	3		Dt. 13.10.2023 D1-16.10.2023
3	Classify Compressor & state working principle	3		D+. 20.(0.20)3 D+ 27.(0.2023 D+ 27.(0.2023
3	State the various methods of transmission and storage of compressed air	3	NOVEMBER	
	State and explain the advantages of use of compressed air in mines	3		D+- 6.11.2023 D+7.11.2023
	Explain the working principle of pneumatic machines	3		D1- 13-11.2023 Dt. Ly. (1.2023
	Internal Combustion Engines	10		
	CTTO Cycle	2	-	D+-18.11.2023 D+-20.11.2023
4	Diesel Cycle	2		D1-21.11.2013 D1-24.11.2023
4	Explain working principle of 2 stroke and 4 stroke petrol and diesel engines	2	DECEMBER	
	Define I.H.P., B.H.P. & Mechanical efficiency of I/C Engine.	2		D+ 2.12.2023 D+ 4.12.2023
	State various applications of I/C Engines in Mining field	2		D+ 5.12.2023 Dr 8.12.2023

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION: MNA

NAME OF THE FACULTY: (1) ER. UDAYA BISWANATH PADHAN,

(2) ER. PRABIN KUMAR SAHOO (LECT. IN MINING)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: ENVIRONMENTAL STUDIES (TH-5)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	The Multidisciplinary Nature of Environmental Studies	4		
1	Definition, scope and importance	2	AUGUST	Dt-1.8.2023 Dt 2.8.2023
	Need for public awareness	2		DI-3-8-2023 DI-78-2023
	Natural Resources	10		
	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people	2		D+ · 8 · 8 · 2023 Dt - 9 · 8 · 2023 D+ · 10 · 8 · 2023 D+ · (4 · 8 · 2023
	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems	2		04. 16.8.2023 D4-17-8.2023
	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources	2	**************************************	D1-21.8.2023 Dt-72-8,2023
2	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity			OI- 23.8.2023 Dt-24-8.2023 OH- 28-8.2023 Dt-29.8.2023
	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies	1		D+ 31.8.2023
	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification	1	SCPTEMBER	Dt. 4.9.2023
	Role of individual in conservation of natural resources	1		pt. 5 · 9. 2023
	Equitable use of resources for sustainable life styles.	1		D+ · 9 -9.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
·	Systems	8		
	Concept of an eco system,Structure and function of an eco system	1		Di · -11 . 9. 2023
	Producers, consumers, decomposers	1		04- 12-9.2023
	Energy flow in the eco systems	1		V+· 13 · 9 · 20 13
3	Ecological succession	1		DI- 14-9.2013
	Food chains, food webs and ecological pyramids	1		Pt. 18 . 9.2023
	Introduction, types, characteristic features, structure and function of the Forest ecosystem	1		DL 21.9.2013
	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries	1		Dr- 25.9.2023
	Rivers, oceans, estuaries eco system	1	- 7	D+ - 26.9.2023
	Biodiversity and it's Conservation	8		
	Definition: genetics, species and ecosystem diversity	1		D+. 77.9.2013
	Biogeographically classification of India	1		Q+ 28, 9, 2023
4	Value of biodiversity: consumptive use, productive use	1	OCTOBER	D+- 3.10.2023
	Social ethical,aesthetic and optin values	1		D+- 4 · 10.2023
	Biodiversity at global, national and local level.	1		DL 5.10.2023
	Threats to biodiversity: Habitats loss	1		Dt- 9.10.2023
	Poaching of wild life	1		DI - 10.10.2023
	Man wildlife,conflicts	1		D+- 11.10.2023

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SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Environmental Pollution	12	=	
	Definition Causes, effects and control measures of:Air pollution	1		Dt - 12.10.2023, 16.10.2023
	Cefinition Causes, effects and control measures of:Water pollution	1		Dt-17.10.2023, 18.10.2023
	Cefinition Causes, effects and control measures of:Soil pollution	1		D+- 19.10.2023
	Cefinition Causes, effects and control measures of:Marine pollution	1		D4. 25.10.2023
	Definition Causes, effects and control measures of:Noise pollution	1		D-1 · 26 · 10 · 2013
5	Definition Causes, effects and control measures of Thermal pollution	1		D4. 30.10.2023
	Definition Causes, effects and control measures of Nuclear hazards	1		DI- 31.10.2023
	Solid waste Management: Causes, effects and control measures of urban industrial wastes	1	NOVEMBER	Dt. 1.11.2023,
	Solid waste Management: Causes, effects and control measures of industrial wastes	1		DI. 2.11.2023
	Role of an individual in prevention of pollution	1		VI. 6.11.2023
	⊡isaster management: Floods, earth quake	1		O1. 7.11.2023
	Disaster management cyclone and landslides	1		Dt. 8.11.2023
	Social Issues and the Environment	10		
	Form unsustainable to sustainable development.	1		D+ · 9 · 4 · 2023
	Urban problems related to energy	1		5+. 13 : 11. 2023
6	Water conservation, rain water harvesting, water shed management	1		DH. 19, 11. 2023
	Resettlement and rehabilitation of people; its problems and concern	1		04.15,11.2023
	Environmental ethics: issue and possible solutions	1		Ot. 16, 11.2023

SI. ,	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Climate change, global warming, acid rain, ozone layer depletion	1		D4. 20:11.2023
	Nuclear accidents and holocaust, case studies	11		Dt · 21 · 11. 2023
	Air (prevention and control of pollution) Act	1		Ot. 22 .11.2023
	Water (prevention and control of pollution) Act.	1		DH. 23.11.2023
	Public awareness	1		Ol. 28.11.2023
	Human Population and the Environment	8		
	Population growth and variation among nations	1		H. 29 · 11. 2023
	Population explosion- family welfare program	2		P4. 30.11.2023
7	Environment and human health	1	DECEMBER	DI. 4.12.2023
	Human Rights	1		Dt. 5.12.2023
	Value Education	1		D1. 6-12.2023
	Role of information technology in environment and human health	2		Dt. 7.12.2023

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION:-MNB

NAME OF THE FACULTY: (1) ER. DILLIP KUMAR DEHURY (H.O.D., MINING ENGG., (2) ER. SWAPNAJIT RAY (LECT. IN MINING ENGG.)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: SURFACE MINING TECHNOLOGY (TH-1)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Choice of Opencast Mining	10		
	State factors affecting choice of Open casting Mining method.	1	AUGUST	D1- 1.8,2023 101-2-8,2023
	Determine overburden/ore ratio	1		0+-4.8.2023
	Find out cut off stripping ratio	1		D1-7.8.2023 D1.8.8.2023
	Determine quarriable limit	1		94-9.8.2023
1	State favorable conditions for mechanized Opencast Mines	1		D4. 11-8.2023 17+-14.8.2023
	Advantages of open cast mines	1		D+-16.8.2023
	Disadvantages of open cast mines	1		D4 - 18. 8. 2023
	State limitations of large open pits	1	90 = A	D1-21.8.2023
	Define Box cut and determine the location of Box cut	1		D4 - 22 · 8. 2023 D4 - 23 · 8 · 2023
	Benching	5		
	Bench parameters	1		D4 - 25.8.2023
2	Height,width and slope of bench	2		D4 - 28 . 8 . 2023, D+- 29 . 8 - 2023
	Determination of length of bench for overburden	1	SEPTEMBER	-O1- 1-9.2023
	Determination of length of bench for ore	1		04-4.9.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Slope Stability	6		
3	Factors affecting slope stability	1		D1-5-9.2023
	Types of slope stability	1		D1 - 8 · 9 · 2023
	Causes of slope stability	2		D+- 11.9.2023 D+ 12.9+ 2023
	Prevention of slope stability	2		D+- 13-9.2023 pt. 15.9.2023
	Explosive and blasting accessories	11		
	Define explosive, state constituents of explosives, properties & characteristics of explosives.	1		D+- (8 · 9 · 2023
	Classify explosives, state composition and uses of explosives	1	× **	10+. 22-9.2023
	Explain PMS and SMS	1		D+ - 25.9.2073
	Define permitted explosive and classify permitted explosive	1		Dr 26.9.2023
4	Explain sheathed, equivalent sheathed and ultra safe explosive	1		0+ - 27 -9.2023
	State properties of permitted explosives	1	OCTOBER	DH-3.10.2023
	State composition & constructional features of safety fuse, detonating fuse	1		DH 4.10.2023
	State composition & constructional features detonating relay, igniter cord, nonel and raydet	1		DI- 6-10.2023
	Describe different types of detonators and uses, state advantages of delay detonators	1		0+ 9.10.2023
	State different types of exploder, its construction and safety features, circuit tester	1		Dt 10.10.2013
	Describe stemming rod, crack detector knife, crimper	1		Dt - 11 -11.2013

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Drilling	8		
	Explain different principles and methods of exploratory drilling in surface mining	2		Dt - 13.10.2023 Dt - (6-10.2023
	State different types of drill used in Opencast mining	1		D+-17-10.2023
5	Describe simple constructional features of churn drill, drills master, wagon drill and jack hammer	2		D+ - 18.10.2023 D+ - 20.10.2023
	State D.T.H.	1		Dt - 25-10.2023
	Describe different types of drill bits in drilling	2	,	D+- 77.10.2023 104-30-10-2023
	Blasting Practices in Mines	10		
	Describe preparation of charge	1	NOVEMBER	D+-31.10.2023 D1-1.11.2023
	State procedure of firing shots	1		D+- 3.11.2023 D+- 6.11.2023
	Direct and inverse initiation	1		01-7-11-2013
	Stemming materials	1		D+ - 8.11.2023
6	Water ampoules	1		D+ - 10,11.2023
	Cushion firing	1		01-13.11.2023
	Define blasting efficiency	1		D1 - 19.11. 2023
	State and describe plaster shooting	1		Dt - 15 · 11. 2023
	Pop shooting	1		D4 - 17 . 11. 2023
	Toe blasting	1		Dt. 20.11.2023
	Controlled Blasting Techniques as per Statutory Provision	6		
7	State and describe pre-splitting	1		D+ - 21 . 11. 2023
	Cushion blasting	1		174 - 22 . 11. 2023
	Muffle blasting	1		St - 24.11.2023

SI.' No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Coyote hole blasting	1		SH- 28.11.2023
	Chambered hole blasting	1		D+· 29.11.2023
	Directional blasting, Electronics Blasting System (EBS)	1	DECEMBER	
	Magazines	4		
	Describe layout of magazine	1		DI ~ 4.1).2023
8	Arrangement of magazine	1		D4 · 5.12.2023
	Different types of magazines	1		D+ · 6 · 12 · 2023
	State their safety feature	1		D1 - 8, 12, 2023

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION :- MNS

NAME OF THE FACULTY: (1) ER. SUNIL KUMAR SAHU, (2) ER. PRANAYA KUMAR BEHERA (LECT. IN MINING)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: MINE SURVEY - I (TH-2)

Si. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Chain Survey	10		
	Survey conventional signs, abbreviation used.standards of lining, inking and coloring.	1	AUGUST	Dt - 1.8.2023 Dt - 3.8-2023
	Selection of scales used.principle of chain surveying	1		Dt- 4. 8-2023
	Instruments used and checking their correctness,ranging and chaining of a line	1		D1 · 8 · 8 · 2023 D1 - 8 · 8 · 2023
	Errors in chaining,obstruction while chaining	1		24 - 10.8-2013
1	Chaining along a sloping ground	1		D4-11-8-2023
	Use of optical square and line range and checking optical square for correctness	1		04-17-8-2023
	Offsets and their measurements	1		0+- 18-8.2023
	Reference sketches of stations	1		D+- 19-8.2023
	Procedure of chain surveying	1		D+ - 20 -8.2023
	Field booking and plotting of chain survey.	1		D4 - 24.8.2023
	Compass Survey	8		
	Prismatic compass, its adjustments and use,true meridians, magnetic meridian, grid line meridian and arbitrary meridian	1		D. 28.8.2023 D+. 29.8.2023
2	W.C.B. and Q.B. and conversion from one to other	1		OL-31.8.2023
	Fore and back bearing and their conversion	1	SEPTEMBER	
	Compute angles from bearing and bearing angles	1		104-2-9.2023

ŞI. Na.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Local alteration and necessary correction to the bearing	1		D1 - 5.9.2023
	Closed and open compass surveying and its plotting	1		DH. 9.9.2023
	Procedure of field booking in compass and chain traverses, adjustment of closing error in compass traversing	1		121 - 8.9.2013
	Surveyor compass(miner's dial),its adjustment and use, Compare prismatic compass with surveyor compass.	1		D1-12.9.2013 D+.14.9.2023
	Plane Table Survey	8		
	Fundamentals of Plane Table Survey	2		01-15.9.2023
3	Two point problems	2		D+-16-9.2023 D1-21-9.2023
	Three point problems and its solution by tracing paper method	2		104-22-9.2023 10+-26.9.2023
	Advantages and disadvantages of plane table	1		DI - 28, 9,2013
	Computation of Areas	8		
	Methods of determining areas.	1		W-30.9.2023
	Find out areas from offset to a base line using	1	OCTOBER	V+ - 3 · (0 · 2013
	Mid ordinate rule	1		D+- 5.10.2023
4	Average ordinate rule	1		D+ - 6.10.2023
	Trapezoidal rule	1		DI - 7.10.2023
1	Simpson's rule	1		0+ 10-10-2023
	Computer area by Planimeter and from graph paper.	2		D+ - 12:10.2023 U+-13.10.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Leveling	10	- 10	
	benchmark M.S.L. Dumpy level	2		Dt-17.10.2023 Dt-19.10.2023
	Adjust dumpy level, modern levels (Auto Level & etc.), and precise staff.	2		D+-20.10.2023 Ut 26.10.2023
5	methods of leveling- Rise & fall method, height of instrument	2		D1-27.10.2023 Dt.31.10.2023
	Errors in ordinary leveling	2	NOVEMBER	D+ - 2.11.2013 D+ - 3.11.2013
	reciprocal leveling, subsidence leveling, setting out gradient, trigonometric leveling, geometrical leveling, and physical leveling.	2		D1-4.11.2023
	Calculation of Ore Reserves	8		
	Classify reserves	2		D4-9.11.2023 DF-16.11.2023
6	Evaluate reserves by exploratory	3		D+14.11.2013 D+ 16.11.2013 D1-17.11.2023
	primary ore reserve by material balance method & decline curve method	3		D+ - 18-\$1.2023 D+ - 21.11.2023 D+ -23.11.2023
	Theodolite	8		
	Temporary and permanent adjustment of Theodolite	2		91-24.11.2073 Dt-28.11.2023
7	Principles of operation & describe different parts	2	DEEKMBER	17+-30.11.2023 OH- 1-12.2023
	Measure Horizontal & Vertical angles	2		D+2.12.2023 01-5.12.2023
	Setting of the instrument	1		04-7.12.2023
	Traversing with Theodolite.	1		D+ · 8-12 2023

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION:-MNB

NAME OF THE FACULTY: (1) ER. AMARENDRA SAHOO,

(2) ER. PRATYUSH ROUT (LECT. IN MINING)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: MINE GEOLOGY - I (TH-3)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Physical Geology	15		
	Weathering	2	AUGUST	D1-3.8.2023 D1-4.8.2023
	Erosion	1		101-5.8.2023
	Erosional land forms by wind	2		D+ 7.8.2023 D+-10.8.2023
	Depositional land forms by wind	1		0-1-11.8.2023
1	Erosional features of river	2		D+-14.8.2023 D1-17.8.2023
	Depositional features of river	1		9+ 18.8.2023
	Differentiate between glacier and iceberg	1		71-19.8.2023
	Erosional features of glacier	2		01-21.8.2023 04-27.8.2023
	Depositional features made by glacier	2		D+ - 25.8.2023 D+ - 28.8.2023
	Moraines and its types	1		34 - 31.8.2013
	Petrology	12		
	Define a Rock. Distinguish between a rock and a mineral.	2	SEPTEMBER	D+ 1.9.2023 Dt - 2.9.2023
	Define Igneous, Sedimentary and Metamorphic rocks.	2		0+4-9.2013 D1-7.9.2023
2	Textures of igneous rock	2		5+-11-9.2023 D+- 14.9.2023
	Structures of igneous rock	2		D1-15-9.2013 P1-16 9.2013
	Structures of sedimentary rock with sketch	2		0+18-9.2023 124.21.9.2023
	Various structures in metamorphic rock	2		DI- 22.9.2023 DI-28.9.2023

SL Na.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Structural Geology	6	=	
	Define Dip. Distinguish between true dip and apparent dip	1		D+ 28.9.2023 D+ - 30.9.2023
	Define strike	1	OCTOBER	D1-5.10.2023
3	Define folds, Classify folds and describe them	1	00,000	D1 - 6.10.2023
	Define faults. Describe the various types of fault	1		D1 - 7-10.2013
	Define unconformity. Describe the various type of unconformity with neat sketches	1	-, , ,	D+ 9.60.2023 D+-12.60.2023
	Define joints. Describe various joints	1	1	D+ 13.60.2023
	Element of Crystallography	12		
	Define a crystal	1		D1 - 16.10.2023 Dt- (9.10.2023
4	Explain Miller's indices	4		D-1 - 20 · [0.2023 _ 26 · [0.2023
	Describe the Symmetry elements and forms present in the normal class of isometric system	7	LOVEMBER	
	Elements of Mineralogy	15	_	
	Define a mineral	1		D+ 9 <11.2023
	Enumerate and describe the physical properties of minerals	2		17 10-11-2023 Dt 13.11.2023
	Describe various optical properties of minerals	2		0+ 16.11.2023 D+ 17-11.2023
5	Explain briefly the silicate structures along with diagrams	2		D+ 18 .11. 2023 D+ - 20 (11.2023
	Mineralogy and physical properties of olivine	2		04-23.11.2023 D1-24.11.2029
	Pyroxene	2	DECEMBER	04-30-11.2023 D+- 1.12.2023
	Quartz	2		0+ 2.12.2023 10+- 4.12.2023
	Feldspar	2		D+7.12.2023 Dt-8.12.2023

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THEORY LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH: MINING ENGINEERING, SEMESTER: 3RD SECTION:- MNB

NAME OF THE FACULTY: (1) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG.), (2) ER. PRADIP KUMAR SAHU (T.A., ELECT. ENGG.)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: MECHANICAL OPERATION IN MINES (TH-4)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE	
	Strength of Materials and Power Transmission	20			
	Define Elasticity,Hook's Law	1	AUGUST	D1 - 1 - 8. 2023	
	Limit of Proportionality.	1		D1-3.8.2013	
	Young's Modulus	1		D+- 5.8.2023	
	Factor of safety. Lateral strain and Poisson's ratio	1		D+. 7-8.2013	
	Stress-strain curve for ductile materials	1		DL. 8 -8. 2023	
	Effect of axial load on bar of Uniform section	1		D4 · 10 · 8 · 2023	
	Effect of axial load on bar of Variable section	1		Dt-14-8.2023	
1	Numerical problems on Uniform section, Variable section	1		D1 - 17 - 8.2023	
	Bending moment and shear force	1		DL-18.8.2023	
	Types of beam and types of loading	1		D1-21-8-2023	
	Explain shear force diagram and bending moment diagram for Cantilever with concentrated loading	1		04. 22. 8. 2023	
	Cantilever with U.D.I. over whole span	1		D1-24.8.2073	
	Simply supported beam with concentration loading	1		D4-28 ·8.2023	

	Simply supported beam with U.D.I. over whole span	1		
SI. lo.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	State bending formula	1		D1. 29. 8.2023
	Define section modules,Find out section modules for beam section of simple cases	1		Dt - 31.8.2023
	Define torsion and state its effects,State application of torsion formula	1	SEPTEMBER	D4 - 2. 9. 2023
	working of Shaft couplings such as hydraulic and magnetic couplings,Belt, chain and rope Drive,Simple and compound gear train,Torque converters	1		D1- 4.9.2013
	State function of flywheel and governors	1		Dt-5.9.2023
	Explain working of watt, purler and proel governors	1		D+- 7-9.1023
	Elements of Hydraulics	15		
	State various fluid properties, Define pressure of fluid and pressure head	1		D+- 11-9.2023
	State and explain working principle of various pressure measuring devices such as Pieccometer tube	1		Dt-12.9.2023
	State and explain continuity equation	1		Dr-14.9.2023
	State and explain Bernoulli's theorem	1		Dt 16 - 9.2023
	Explain working of venturimeter	1		DI- 18.9.2023
2	Solve numerical problems on above	1		D+ - 21 - 9 - 2023
	Define and classify orifices	1		0+-25-9.2023
	State the formula and discharge for rectangular orifices and solve problems	1		D1-26.9.2023
ar Po	Define and differentiate between orifice and notch.	1		04-28,9.2023
	Classify notches, State formula for discharge through notches & solve problem on above	1		D+ 30 .q.2023

•	State and explain laws of fluid friction	1		
SL No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	State and explain loss of head due to friction (Darcy weisbach formula	1	OCTOBBL	DH - 3.10.2023 DH 5-10.2023
	Explain hydraulic gradient and energy gradient.	1		D+ 17.10.2013 DL. 9.10.2023
3	Compressed Air	15		
	Exp ain introduction of compressed air as a power	3		D+· 10·10·2023 D1-12·10·2023 D+· 16·10·2023 D+-17·10·2023
	Classify Compressor & state working principle	3		D+ 19.10.2023 D+ 26.16.2023 D+-30.10.2023 D+.31.10.2023
	State the various methods of transmission and storage of compressed air	3	NOVEMBER	5. 0
	State and explain the advantages of use of compressed air in mines	3		01.7-11.2023 DI. 9.11.2023 DI.13-11.2023
	Exp ain the working principle of pneumatic machines	3		D1. 14.11.2023 D1-16.11.2023
	Internal Combustion Engines	10		
	OTTO Cycle	2		D4-20.11.2073 D4-21.11.2023
1	Diesel Cycle	2		0+23.11.2023 91-28.11.2023
	Explain working principle of 2 stroke and 4 stroke petrol and diesel engines	2	OSEEMBER	Dt 30.11.2023 D1-1.12 2023
	Define I.H.P., B.H.P. & Mechanical efficiency of I/C Eng ne.	2		D4-2.12.2023 DI-4.12.2023
	State various applications of I/C Engines in Mining field	2		0+- 5.12.2013 0+-8.12.2023

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BRANCH: MINING ENGINEERING, SEMESTER: 3RD

SECTION: MNB

NAME OF THE FACULTY: (1) ER. UDAYA BISWANATH PADHAN,

(2) ER. PRABIN KUMAR SAHOO (LECT. IN MINING)

SEMESTER FROM: 01.08.2023 to 09.12.2023

THEORY SUBJECT: ENVIRONMENTAL STUDIES (TH-5)

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
1	The Multidisciplinary Nature of Environmental Studies	4		
1	Definition, scope and importance	2	AUGUST	Dt- 1.8.2023, 3.8.2023
	Need for public awareness	2		Ot. 4.8.2023 , 7.8.2023
	Natural Resources	10		
	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people	2		D4.8.8.2023
	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems	2		Dt-14-8.2023 Dt.17.8.2023 Dt.18.8.2023
	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources	2		Dt. 21.8.2023 Dt. 22.8.2023
	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity			Dt. 24.8.2023 Dt. 25.8.2023 Dt. 78.8.2023 Ot. 29.8.2023
	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies	1		0+.31.8.2023
	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification	1	SEPTEMBER	D1 · 1 · 9 . 2023
	Role of individual in conservation of natural resources	1		OI. 4. 9. 2023
	Equitable use of resources for sustainable life styles.	1		OH. (, 9.202)

S1. lo.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Systems	8		
	Concept of an eco system,Structure and function of an eco system	1		pt. 7.9.2023
	Producers, consumers, decomposers	1		94. 8 -9.2023
	Energy flow in the eco systems	1		Q4. 11_ q. 2023
3	Ecological succession	1		74.12.9.2013
	Food chains, food webs and ecological pyramids	1		Dt. 14 - 9. 2023
	Introduction, types, characteristic features, structure and function of the Forest ecosystem	1		Dt. 15.9.2023
	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries	1		D4. 18 - 9. 2023
	Rivers, oceans, estuaries eco system	1		04.21-9.2023
	Biodiversity and it's Conservation	8		
	Definition: genetics, species and ecosystem diversity	1		DI. 22,9.2023
	Biogeographically classification of India	1		Dt. 25 .9.2023
	Value of biodiversity: consumptive use, productive use	1		D1.26-9.2023
4	Social ethical,aesthetic and optin values	1		D+ · 28 · 9· 2023
	Biodiversity at global, national and local level.	1	OCTOBER.	D+· 3 · 10 · 20 23
	Threats to biodiversity: Habitats loss	1		D+ 5.10.2023
	Poaching of wild life	1		D1.6/10.2023
	Man wildlife,conflicts	1		D1. 9.10.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Environmental Pollution	12		
	Definition Causes, effects and control measures of:Air pollution	1		04.10.10.2023, 12.10.2023
	Definition Causes, effects and control measures of:Water pollution	1		04. 13.10.2023
	Definition Causes, effects and control measures of:Soil pollution	1	*	14. 16. 10.2023
	Definition Causes, effects and control measures of:Marine pollution	1		04. 17.10.2013
	Definition Causes, effects and control measures of:Noise pollution	1		04. 19. (0.2023
5	Definition Causes, effects and control measures of Thermal pollution	. 1		01-20, [0.2023
	Definition Causes, effects and control measures of Nuclear hazards	1		D+· 26 .10.2023
	Solid waste Management: Causes, effects and control measures of urban industrial wastes	1		71. 27 ,10-2023
	Solid waste Management: Causes, effects and control measures of industrial wastes	1		O4· 30 .10.2023
	Role of an individual in prevention of pollution	1		D4. 31.10.2023
	Disaster management: Floods, earth quake	1	NOVEMBER	04. 2.11.2023
	Disaster management cyclone and landslides	1		Dt. 3 .11.2023
	Social Issues and the Environment	10		
	Form unsustainable to sustainable development.	1		2+· 6 ·11.2023
	Urban problems related to energy	1		DI. 7.11.2023
6	Water conservation, rain water harvesting, water shed management	1		DH. 9-11.2023
	Resettlement and rehabilitation of people; its problems and concern	1		24. 10 .11.2023
	Environmental ethics: issue and possible solutions	1		13 ·11.2023

SI. No.	CHAPTERS TO BE COVERED	NO OF PERIODS AS PER ACADEMIC CALENDAR	MONTH	ACTUAL PROGRESS OF THE COURSES MADE
	Climate change, global warming, acid rain, ozone layer depletion	1		D1.14.11.2023
	Nuclear accidents and holocaust, case studies	11		01.16.11.2023
	Air (prevention and control of pollution) Act	1		Dt. 17.11.2023
	Water (prevention and control of pollution) Act.	1	¥	04. 20.11.2023
	Public awareness	1		Dt. 21, 11. 2023
	Human Population and the Environment	8		
	Population growth and variation among nations	1		Dr. 23 .11.2023
	Population explosion- family welfare program	2		Qt. 24, 11. 2023 , 28.11-2013
7	Environment and human health	1		04. 30.11.1013
	Human Rights	1	DECEMBER	1 12 2.20
	Value Education	1		24.5.12.2023
	Role of information technology in environment and human health	2		Dr. 7.12.2023 ,8.12.2023

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CHHENDIPADA, ANGUL

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PRACTICAL LESSON PLAN FOR THE SESSION 2023-24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNA1

MAME OF THE FACULTY: (1) ER. SUNIL KUMAR SAHU, (2) ER. PRANAYA KUMAR BEHERA (LECT. IN MINING ENGG.)

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MINE SURVEY-I LAB. (PR-1)

CLASS ALL	OTTED	/WEEK:-	06 PERIODS
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SI. Io.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	CHAIN SURVEY			
	a.Ranging a line more than 100m in length and measuring its correct length applying corrections.	AUGUST		D+. 2.8.2023 D+. 7-8.2023
	b.Taking off sets of objects on both sides of a line.			Ot. 9-8.2023
l	c. Plotting the above detials.			Dr. 16 - 8. 2023 Dt. 21 - 8. 2023
	d. Overcoming obstruction in chaining; vision free, chaining obstructed (pond, river) Chaining free, vision obstructed (Rising) Both vision and chaining obstructed (building).	SEPTEMBER		91.23.8.2023 101.28.8.2023 101.4.9.2023
	e.Measuring on sloping ground.			D1. 11-9.2023 D1. 13-9.2023
	f. Chain surveying and plotting of small plot by triangulation.			04. 18.9.2023

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	COMPASS SURVEY			
2	a.Finding bearing of line and applying check.	000368		0+. 27. 9.2023 0+. 4.16.2023
	b.Closed traversing of a small plot with station (Without intermediate filling)			D+ · 9 · 10 · 2023 D+ · 11 · 10 · 2023
	c.Open traversing of a small length with few station(Without offset)			Dt. 18 · 10 · 2023 Dt. 18 · 10 · 2023
	d.Plotting both the above traverses applying correction.			Dt. 25.10.2023 Dt. 30.10.2023
	LEVELS			
3	a. Temporary and permanent adjustment senstivity of bubble tube practice with different types of level (Auto level & etc.)	MOLEWRER		Dt. 6-11.2023
4	Temporary & permanent adjustment of the odolite.			Dt. 8 11.2023 Dt. 13 11.2023
5	Measurment of horizontal angle by reiteration and repetition methods.			Dt. 15.11.2023 Dt. 20.11.2023
6	Measurment of vertical angle.	DECEMBER		04 · 22 · 11 · 2023 4 · 12 · 2023 04 · 29 · 11 · 2023 6 · 12 · 2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNA1

NAME OF THE FACULTY: (1) ER. AMARENDRA SAHOO, (2) ER. PRATYUSH ROUT (LECT. IN MINING ENGG.)

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MINING GEOLOGY-1 LAB. (PR-2)

CLASS ALLOTTED /WEEK:- 06 PERIODS

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES	
1	IDENTIFICATION OF ROCK FORMING AND ORE VINERALS IN HAND SPECIMENS.	AUGUST SEPTEMBER		Dt. 1.8.2023 Dt. 4.8.2023 Dt. 8-8.2023 Dt. 11.8.2023 Dt. 18.8.2023 Dt. 18.8.2023 Dt. 22.8.2023	01. 25.8.2013 01. 29.8.2023 01. 1.9.2023 01. 5. 9.2023 01. 8.9.2023 01. 8.9.2023
2	DETERMINATIONS OF SPECIFIC GRAVITY BY WORKERS STEEL YARD BALANCE.	OCTOBER		D1. 15-9.2023 D1. 22 - 9.2013 D1. 26 - 9.2023 D1. 3.10-2023 D1. 6.10.2023	Pt. 10.10.202 Dt. 13.60.20 Dt. 17.10.20
3		JOVEMBER-		04. 3. 11.2023 04. 4. 11.2023 04. 10. 11.2023 04. 14. 11.2023 04. 17.11.2023 04. 24. 11. 2023 04. 24. 11. 2023	D4. 28. 11.202 D4. 1.12.20 D4. 5.12.20 D4. 8.12.20

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNA1

NAME OF THE FACULTY: (1) ER. DEWAN KUMAR SAHU (LECT. IN MECH. ENGG.), (2) ER. PRADIP KUMAR SAHU (T.A., MECH. ENGG.)

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MECHANICAL OPERATION IN MINES LAB. (PR-3)

CLASS ALLOTTI	ED /WEEK:-	06 PERIODS
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SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	BERNOULLI'S THEOREM BY BERNOULLI'S VERIFICATION APPARATUS.	Te upux		01. 2.8.2023 JH. 3.8.2023 04. 9.6.2023
2	DETERMINE RATE OF FLOW THROUGH THE VENTURIMETER SET-UP.	SEPTEMBER		D+. 23.8.2013 D4. 24.8.2023 D+. 31-8.2023 D4. 7.9.2013 D+13.9.2013 D1.14.9.2013
3	CONDUCT TENSILE TEST OF A MILD STEEL SPECIMEN AND PLOT STRESS STRAIN CURVE ,SHOW SALIENT POINT ON IT.	october		04.21.9.2023 04.27.9.2023 04.28.9.2023 04.69.10.2023 04.5.10.2023 04.11.10.2023
4		November		04. 12.10.2023 04. 18.10.2023 04. (9.10.2023 04. 25. (0.2013 04. 26.60.202) 94. 1.11.2023
5	STUDY OF 2 STROKE AND 4-STROKE DIESEL ENGINES.			04. 2.11.2023 04. 8.11.2023 04. 9.11.2023 04. 15.11.2023 04. 16.11.2023 04. 22.11.2023
6	CONDUCT I/C ENGINE TESTING ON SINGLE CYLINDER DIESEL ENGINE AND FIND OUT I.H.P ,B.H.P AND MECHANICAL EFFICIENCY.	oecens er		04.23.11.2023 04.23.11.2023 04.20.11.2023 04.7.12.2023 04.7.12.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:- MINING ENGG.

SEMESTER: 3RD

SECTION:- MNA1

NAME OF THE FACULTY: (1) ER. LIPUN DEHURY, (2) ER. GOBINDA CHANDRA SETHY (LECT. IN MINING ENGG.)

SEMESTER FROM DT.01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES

CLASS ALLOTTED /WEEK :- 03 PERIODS

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	Extension of lecturers	August		2 8 23 7 8 23
	Personalety Development			23 8 23
	Environmental Issuers	September		4 9 23, 11 / 9 / 23,
	Quiz//tobbies/ Field	October		11/10/23, 18/10/23
	Cultural Activities	November		8/11/23, 20/11/23
	Ubrary Studies Seminar	December		4 12 23

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- 1919 - 1949	P.0	C.I.E.T., CHHE	NDIPADA, DIST- ANGUL	
	PRACTIC	CAL LESSON PI	AN FOR THE SESSION 2023-24	
BRAN	CH:-MINING ENGG.	SEME	STER: 3RD	SECTION: MNA2
NAME	OF THE FACULTY: (1) ER. DILLIP KUMAR DEHURY	(H.O.D., MINING	ENGG.), (2) ER. SUNIL KUMAR SAHU, (LECT. IN MINING ENGG.)
SEME	STER FROM DT. 01.08.2023 TO 09.12.2023		PRACTICAL SUBJECT: M	INE SURVEY-I LAB. (PR-1)
CLAS	S ALLOTTED /WEEK:- 06 PERIODS			
SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	CHAIN SURVEY			
	a.Ranging a line more than 100m in length and measuring its correct length applying corrections.	AUGUST		D1. 6.8.2023 D4. 4.8.202 D4.8.8.2023
	b.Taking off sets of objects on both sides of a line.			Dt. 11-8.2023 Dt. 18-8.202 Dt. 22-8.2023
1	c. Plotting the above detials.			Dt. 25.8.2023 Dt. 29.8.2023
	d. Overcoming obstruction in chaining; vision free, chaining obstructed (pond, river) Chaining free, vision obstructed (Rising) Both vision and chaining obstructed (building).	SEPTEMOSEX		Dt. 1. 9. 2023 Dt. 5. 9.2023 Dt 8, 9. 2023
	e.Measuring on sloping ground.			DH 15 -9.2023
	f. Chain surveying and plotting of small plot by triangulation.			Dt. 22.9.2023 Pt. 26.9.2023

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	COMPASS SURVEY			
2	a.Finding bearing of line and applying check.	OCTOBER		Dt. 3.10.2023 Dt. 6.10.2023
	b.Closed traversing of a small plot with station (Without intermediate filling)			OH. 13.10.2023 OH. 17.10.2023
	c.Open traversing of a small length with few station(Without offset)			0+. 20:10.2023 pt. 31.10.202
	d.Plotting both the above traverses applying correction.	MONEMBER		D1. 3. 11.2023 D1. 7.11.6023
	LEVELS			
3	a. Temporary and permanent adjustment senstivity of bubble tube practice with different types of level (Auto level & etc.)			2+ 16.11.2023 Dt. 14.11.2023
4	Temporary & permanent adjustment of the odolite.			D1. 21.11.2023
5	Measurment of horizontal angle by reiteration and repetition methods.			0t·24.11.2023 Ot·28.11.2023
6	Measurment of vertical angle.	Stumber		Dt. 1.12.2023 Dt.5.12.20 Dt. 8.12.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNA2

NAME OF THE FACULTY: (1) ER. UDAYA BISWANATH PADHAN, (2) ER. AMARENDRA SAHOO (LECT. IN MINING ENGG.)

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MINING GEOLOGY-1 LAB. (PR-2)

CLASS ALLOTTED /WEEK:- 06 PERIODS

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	IDENTIFICATION OF ROCK FORMING AND ORE MINERALS IN HAND SPECIMENS.	AUGUST SEPTEMBER		04. 2.8.2013 04. 7.8.2023 04. 9.8.2023 04. 9.8.2023 04. 14. 8.2023 04. 14. 8.2023 04. 14. 9.2023 04. 16. 8.2023 04. 16. 8.2023 04. 16. 8.2023 04. 18. 9.2023
2	DETERMINATIONS OF SPECIFIC GRAVITY BY WORKERS STEEL YARD BALANCE.	O et O REP		D1. 25.9.2023 D4. 27.9.2023 D4. 9.10.2023 D4. 9.10.2023 D4. 9.10.2023 D4. 30.110.202 D4. 11.10.2023
3	ANALYSIS OF THIN SECTIONS OF MINERALS AND ROCKS UNDER THE MICROSCOPES.	Monteures		91. . .2023 91. 6.11.2023 91. 8.11.2023 91. 8.11.2023 91. 13.11.2023 91. 15. .2023 91. 15. .2023 91. 20.11.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNA2

NAME OF THE FACULTY: (1) ER. DEWAN KUMAR SAHU (LECT. IN MECH. ENGG.), (2) ER. PRDIP KUMAR SAHU (T.A., MECH. ENGG.)

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MECHANICAL OPERATION IN MINES LAB. (PR-3)

CLASS ALLOTTED /WEEK:- 06 PERIODS

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	BERNOULLI'S THEOREM BY BERNOULLI'S VERIFICATION APPARATUS.	AUGUST		Dt. 2.8.2023 Dt. 10-8.2023 Dt. 3-8.2023 Dt. 16.8.2023 Ot. 9.8.2023 Dt. 17-8.2023
2	DETERMINE RATE OF FLOW THROUGH THE VENTURIMETER SET-UP.	CEPTEMBER	•	04. 23. 8. 2023 Ot. 7. 9. 2023 04. 24. 8. 2023 Ot. 13. 9. 2023 04. 31. 8. 2023 Ot. 14. 9. 2023
3	CONDUCT TENSILE TEST OF A MILD STEEL	october		D4.21.9.2023 Of. 9.10.202 D4.27.9.2023 D4 5-10.202 D4.28-9.2023 D4:11.10.202
4	DETERMINE VOLUMETRIC EFFICIENCY OF AIR-COMPRESSOR.			17. 12.10.2013 04. 25.10.20 04. 18.10.2023 04. 26.10.20 04.19.10.2023 04. 1.11.202
5	STUDY OF 2 STROKE AND 4-STROKE DIESEL ENGINES.	JOVEMBER		D1. 2. 11.2023 D4. 15. 11.2023 D1. 8-11.2023 D1. 9-11.2023 D1. 01. 11.202
6	CONDUCT I/C ENGINE TESTING ON SINGLE CYLINDER DIESEL ENGINE AND FIND OUT I.H.P ,B.H.P AND MECHANICAL EFFICIENCY.	DECEMBER		04. 23-11.2023 04.6.12.202 04. 29.11.2023 04.7-12.202 04. 30.11.2023

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P.C.I.E.T., CHHENDIPADA, DIST-ANGUL PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24 BRANCH:- MINING ENGG. **SEMESTER: 3RD** SECTION:- MNA2 NAME OF THE FACULTY : (1) ER. LIPUN DEHURY, (2) ER. GOBINDA CHANDRA SETHY (LECT. IN MINING ENGG.) SEMESTER FROM DT.01.08.2023 TO 09.12.2023 PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES CLASS ALLOTTED /WEEK :- 03 PERIODS AS PER ACADEMIC CALENDAR & NAME OF THE PRACTICAL EXPERIMENT/JOBS **ACTUAL PROGRESS OF THE** SI. MONTH TIME TABLE COURSES MADE No. TO BE COVERED **CLASS DAYS DATES** Extension of heutures 2/8/23 1) August 9/23 Faculty Development September, Environmental Issues 4/9/23, 11/9/23 18/9/23 Quiz/stobbles/ Field visit Outober 11 10/23 , 18/10/23 November Cultural Activities 8/11/23, 20/11/23

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P.C.I.E.T.ROHHENDIPADA Puma Chandra Institute of Engineering & Technology CHHENDIPADA, ANGUL

- V.S.			NDIPADA, DIST- ANGUL AN FOR THE SESSION 2023-24	
BRAN	CH:-MINING ENGG.		STER: 3RD	SECTION: MNB1
NAME	OF THE FACULTY : (1) ER. SUNIL KUMAR SAHU, (
SEME	STER FROM DT. 01.08.2023 TO 09.12.2023		PRACTICAL SUBJECT: MI	NE SURVEY-I LAB. (PR-1)
CLAS	S ALLOTTED /WEEK:- 06 PERIODS			
SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	CHAIN SURVEY			
	a.Ranging a line more than 100m in length and measuring its correct length applying corrections.	AUGUST		D+. 9-8.2023 D+. 9-8.2023
	b.Taking off sets of objects on both sides of a line.			04.14.8.2023 H.21.8.202 O+16.8.2023
1	c. Plotting the above detials.			04. 23.8.2023 04. 28.8.2023
	d. Overcoming obstruction in chaining; vision free, chaining obstructed (pond, river) Chaining free, vision obstructed (Rising) Both vision and chaining obstructed (building).	SEPTEMBER		Dr. y. 9.2023 Dr 11-9.2023
	e.Measuring on sloping ground.			Ot 13 - 9.2023
	f. Chain surveying and plotting of small plot by triangulation.			Ot, 25, 9.2023 Ot, 27, 9.2023

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	COMPASS SURVEY			
	a.Finding bearing of line and applying check.	000BER-	*	Ot. 4.10,202) Dt.9.10.2023
2	b.Closed traversing of a small plot with station (Without intermediate filling)			Dt. 18-10.6023
	c.Open traversing of a small length with few station(Without offset)			Dt. 25.10.2023 Dt. 30.10.2023
	d.Plotting both the above traverses applying correction.	November		DH. 1.11.2023 DH. 6.11.2023
	LEVELS			
3	a. Temporary and permanent adjustment senstivity of bubble tube practice with different types of level (Auto level & etc.)			Dt 8 · 11 · 2023 Dt - 13 · 11 · 2023
4	Temporary & permanent adjustment of the odolite.			Ot - 15.11.2023 Ot - 20:11.2023
5	Measurment of horizontal angle by reiteration and repetition methods.			D4- 22 · 11. 2023 D4- 29 · 11. 2023
6	Measurment of vertical angle.	Oscember		Ot. 4.12.2023 Ot. 6.12.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNB1

NAME OF THE FACULTY: (1) ER. AMARENDRA SAHOO, (3) ER. PRATYUSH ROUT (LECT. IN MINING ENGG.)

SEMESTER FROM DT. 101.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MINING GEOLOGY-1 LAB. (PR-2)

CLASS ALLOTTED /WEEK:- 06 PERIODS

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	IDENTIFICATION OF ROCK FORMING AND ORE MINERALS IN HAND SPECIMENS.	AUGUST SEPTEMBER		DI. 1.8.2013 Ot. 24.6.2023 DI. 3.8.2023 DI. 29.8.2023 DI. 8.8.2023 OI. 31-8.2023 DI. 10.8.2013 OI. 5.9.2023 DI. 17.8.2013 OI. 7.9.2023 DI. 12.8.2023 OI. 12.9.2023
2	DETERMINATIONS OF OPERIFIC OR AVIETY BY	OCTOBER		Dt-14 a. 2023 Dt-21 · q. 2023 Dt-21 · q. 2023 Dt-26 · 9. 2023 Dt-17 · (0.2023 Dt-28 · 9.2023 Dt-3 · (0.2023 Dt-3 · (0.2023 Dt-5 · (0.2023 Dt-5 · (0.2023 Dt-5 · (0.2023 Dt-2023 Dt-5 · (0.2023
3	ANALYSIS OF THIN SECTIONS OF MINERALS AND ROCKS UNDER THE MICROSCOPES.	NOVEMBER DELEMBER		91. 2.11.2023 12. 7.11.2023 12. 9.11.2023 12. 9.11.2023 12. 12. 2023 12. 21. 12. 2023 12. 21. 12. 2023 12. 22. 23. 24. 7. 12. 2023 12. 22. 23. 24. 7. 12. 2023

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Engineering & Technology
CHHENDIPADA, ANGUL

PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNB1

NAME OF THE FACULTY: (1) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG), , (2) ER. PRADIP KUMAR SAHU (T.A., MECH. ENGG.)

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MECHANICAL OPERATION IN MINES LAB. (PR-3)

CLAS	S ALLOTTED /WEEK:- 06 PERIODS			2.2.()
SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	BERNOULLI'S THEOREM BY BERNOULLI'S VERIFICATION APPARATUS.	AUGUST		01. 2.8.2013 01. 11.6.2023 01. 9.8.2023 01. 16-8.2023 01. 9-8.2023 01. 18-8.2023
2	DETERMINE RATE OF FLOW THROUGH THE VENTURIMETER SET-UP.	SERTEMBER	•	04. 23.8.2013 DL 8.9.2023 04, 25.8-2013 DL 13-9.2013 04. 1.9.2023 PA. 15.9.2023
3	CONDUCT TENSILE TEST OF A MILD STEEL	OCTOBER		D4. 22.9.2023 D4. 6.10.2023 D4. 27.9.2023 D4. 11.10.2023 D4. 4.10.2023 D4.13.(0,2023
4	DETERMINE VOLUMETRIC EFFICIENCY OF AIR	November-		Ot. 18.(0.2023 Ot. 25. 10.2013 Ot. 20.10.2023 Ot. 1.1/.2023 Ot. 25.(0.2023 Ot. 3.11.2023
5	STUDY OF 2 STROKE AND 4-STROKE DIESEL ENGINES.			04.8.11.2023 04.17.11.2023 04.10.11.2023 04.22.11.2023 04.15.11.2023 04.24.11.2023
6	CONDUCT I/C ENGINE TESTING ON SINGLE CYLINDER DIESEL ENGINE AND FIND OUT I.H.P ,B.H.P AND MECHANICAL EFFICIENCY.) seembs v		04. 29.11.2023 DA. 8-12-2023 04. 1.12-1023 04. 6.12-2023

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P.C.I.E.T., CHHENDIPADA, DIST-ANGUL PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24 BRANCH:- MINING ENGG. **SEMESTER: 3RD** SECTION:- MNB1 NAME OF THE FACULTY : (1) ER. LIPUN DEHURY, (2) ER. GOBINDA CHANDRA SETHY (LECT. IN MINING ENGG.) SEMESTER FROM DT.01.08.2022 TO 09.12.2023 PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES **CLASS ALLOTTED /WEEK: - 03 PERIODS** AS PER ACADEMIC CALENDAR & **ACTUAL PROGRESS OF THE** NAME OF THE PRACTICAL EXPERIMENT/JOBS SI. MONTH **TIME TABLE COURSES MADE** No. TO BE COVERED **CLASS DAYS** DATES extension of

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CHHENDIPADA, ANGUL

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	PRACTIC	CAL LESSON PL	AN FOR THE SESSION 2023-24	
BRAN	CH:-MINING ENGG.	SEME	STER: 3RD	SECTION: MNB2
NAME	DF THE FACULTY: (1) ER. SUNIL KUMAR SAHU, (2) ER. PRANAY	A KUMAR BEHERA (LECT. IN MINING	G ENGG.)
SEME	STER FROM DT. 01.08.2023 TO 09.12.2023		PRACTICAL SUBJECT: MI	NE SURVEY-I LAB. (PR-1)
CLAS	S ALLOTTED /WEEK:- 06 PERIODS			
SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	CHAIN SURVEY			
	a.Ranging a line more than 100m in length and measuring its correct length applying corrections.	AUGUST		D4. 2.8.2013 D4.8.8.2013 D4.10-8.2013
	ສ. aking off sets of objects on both sides of a line.			9+. 17.8.2023 O+. 22.8.2023 O+. 24.8.2023
1	c. ⊃lotting the above detials.			Dt. 29.8.2013 Dt. 31.8.2023
	∃. Overcoming obstruction in chaining; vision iræ,chaining obstructed (pond, river) Chaining iræ,vision obstructed(Rising) Both vision and ⊃haining obstructed (building).	SERTEMBER		D4. 5.9.2023 D4. 7.9.2023 P4. 12-9.2023
	■.Measuring on sloping ground.			0+, 14, 9, 2023 0+, 21-9, 2023
	i. Chain surveying and plotting of small plot by riangulation.			01, 26-9.2023 01, 28-9.2023

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
	COMPASS SURVEY			
	a.Finding bearing of line and applying check.	OCTOBER		01. 3.10.2023 01.5.10.20) 01.10.10.2023
2	b.Closed traversing of a small plot with station (Without intermediate filling)			04.12.10.2023 04.17.10.2023
	c.Open traversing of a small length with few station(Without offset)			Ot. 19.10.2023 Ot. 26.10.2023 Ot. 31.10.2023
	d.Plotting both the above traverses applying correction.	November		Ot. 2.11.2023 Ot. 7.11.2023
	LEVELS			
3	a. Temporary and permanent adjustment senstivity of bubble tube practice with different types of level (Auto level & etc.)			D1. 9-11.2023 Dt. 19.11.2023
4	Temporary & permanent adjustment of the odolite.			Dr. 16.11.2023 Pt. 21.11.2023
5	Measurment of horizontal angle by reiteration and repetition methods.			Ot- 23.11.2023 Ot- 28.11.2023 Ot- 30.11.2023
6	Measurment of vertical angle.	December		OH. 5.12.2023 OH: 7,12.2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNB2

NAME OF THE FACULTY: (1) ER. AMARENDRA SAHOO, (2) ER. PRATYUSH ROUT (LECT. IN MINING ENGG.)

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

PRACTICAL SUBJECT: MINING GEOLOGY-1 LAB. (PR-2)

CLASS ALLOTTED /WEEK:- 06 PERIODS

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES
1	IDENTIFICATION OF ROCK FORMING AND ORE MINERALS IN HAND SPECIMENS.	AUGUST SEPTEMBER		DH. 2.8.2023 DH. 7-8.2023 DH. 9. 9.2023 DH. 9. 8.2023 DH. 11. 9.2013 DH. 14. 8.2023 DH. 13. 9.2023 DH. 16. 8.2023 DH. 18. 9.2023 DH. 21. 8.2023 DH. 25. 9.2023 DH. 23. 8.2023 DH. 23. 8.2023
2	DETERMINATIONS OF SPECIFIC GRAVITY BY	OCTOBER		D4. 4.19.2023 D4. 9.10.2023 D4.11.10.2023 D4.16.10.2023 D4.18.10.2023 D4.28.10.2023
3	ANALYSIS OF THIN SECTIONS OF MINERALS AND ROCKS UNDER THE MICROSCOPES.	NOVEMBER-		91. 1.11. 2023 94. 20 . 11. 2023 91. 6. 11.2023 94. 22 - 11. 2023 91. 8.11. 2023 91. 29 . 11. 2023 91. 13. 11. 2023 91. 9. 12. 2023 91. 15. 11. 2023 91. 6. 12. 2023

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PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24

BRANCH:-MINING ENGG.

SEMESTER: 3RD

SECTION: MNB2

04.12.11.2023

1.12.2023

Dt. 8.12.2023

6 . 12-2023

24.

Dt.

NAME OF THE FACULTY: (1) ER. RASABIHARI SAHU (LECT. IN MECH. ENGG), (2) ER. PRADIP KUMAR SAHU (T.A., MECH. ENGG.)

DECEMBER

SEMESTER FROM DT. 01.08.2023 TO 09.12.2023

CLASS ALLOTTED /WEEK:- 06 PERIODS

PRACTICAL SUBJECT: MECHANICAL OPERATION IN MINES LAB. (PR-3)

SI. No.	NAME OF THE PRACTICAL EXPERIMENT/JOBS TO BE COVERED	MONTH	AS PER ACADEMIC CALENDAR & TIME TABLE CLASS DAYS	ACTUAL PROGRESS OF THE COURSES MADE DATES	
1	BERNOULLI'S THEOREM BY BERNOULLI'S VERIFICATION APPARATUS.	August		Dt. 9-8-2013	Ot. 11-8.2027 Ot. 16-8.2023 Ot. 18-8.2023
2		SEPTEMBER		Ot. 23.8.2013 Ot. 25.8.2013 Ot. 8.9.2023	Ot. 13.9-2013 Ot. 15-9:2013 Ot. 22.9.2023
3	CONDUCT TENSILE TEST OF A MILD STEEL	040868		Dt. 27.9.2023 Dt. 4-10.2023 Dt-6.10.2023	9+11.10.2023 9+,13.10.2023 9+,18.10.2023
4	DETERMINE VOLUMETRIC FEELOIENOV OF AIR	MONEMBER		Dt. 20.10.2023 Dt. 25.10.2023 Ot. 25.10.2023	Dt. 1. 11.2023 Ot. 3.11.2023 Dt. 8.11.2023
5	STUDY OF 2 STROKE AND 4-STROKE DIESEL ENGINES.			Dt. 10 -11.2023 Ot. 15 .11.2023	Dt. 22.11.2023 Ot. 24.11.2023

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CONDUCT I/C ENGINE TESTING ON SINGLE

,B.H.P AND MECHANICAL EFFICIENCY.

CYLINDER DIESEL ENGINE AND FIND OUT I.H.P.

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0+.29.11.2023

P.C.I.E.T., CHHENDIPADA, DIST-ANGUL PRACTICAL LESSON PLAN FOR THE SESSION 2023 - 24 BFANCH: - MINING ENGG. **SEMESTER: 3RD SECTION:- MNB2** NAME OF THE FACULTY : (1) ER. LIPUN DEHURY, (2) ER. GOBINDA CHANDRA SETHY (LECT. IN MINING ENGG.) SEMESTER FROM DT.01.08.2022 TO 09.12.2023 PRACTICAL SUBJECT: STUDENT CENTRED ACTIVITIES CLASS ALLOTTED /WEEK :- 03 PERIODS AS PER ACADEMIC CALENDAR & **ACTUAL PROGRESS OF THE** NAME OF THE PRACTICAL EXPERIMENT/JOBS SI. MONTH TIME TABLE **COURSES MADE** No. TO BE COVERED **CLASS DAYS** DATES Extension o Sept Sno Bonne DC+ 0 NOV RC

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