

Academic Lesson Plan of Summer 2024

Department : MINING ENGG.	Semester : 4TH	Name of the Teaching Faculty : S. BISWAL
Subject : MINES SURVEY -II	No. of Days/per week class allotted : 4Period/week	Semester from : 16TH JANARY 2024
		No of Weeks : 15 Weeks
		Topic to be covered :
WEEK	DAY	TOPIC
1st Week	1st	Define Stadia and its Principle.
	2nd	Define Stadia and its Principle.
	3rd	Explain Diaphragm.
	4th	Explin Reticules.
2nd Week	1st	Explain Dtacheometer.
	2nd	Explin Instrument constant.
	3rd	Findout Height and Distance from Stadia intercept Method.
	4th	Findout Height and Distance from Tangential System.
3rd Week	1st	Findout Height and Distance from movable Air Method.
	2nd	State Purpose and principle involved in Tringulation method.
	3rd	State Purpose and principle involved in Tringulation method.
	4th	Classified various methods of Triangulation.
4th Week	1st	Explain Primary Triangulation.
	2nd	Explain Tringulation.
	3rd	Explain tertiary colliery Triangulation.
	4th	Develop concept about Reconnaissance survey.
5th Week	1st	Describe methods of measuring Angles.
	2nd	Types of Theodolite used in Tringulation Survey.
	3rd	Describe the Methods of Basic line measurement using E.D.M
	4th	Define Tap Correction.
6th Week	1st	State construction of Triangulation Station of Permanent nature.
	2nd	State construction of Triangulation Station of Permanent nature.
	3rd	State direct corelation by traversing Methods.
	4th	State direct corelation by Optical Methods.
7th Week	1st	Describe Orientation by wires in two Shafts.
	2nd	Explain correlation by Mines in Vertical Shafts.
	3rd	Explain correlation by Mines in Vertical Shafts.
	4th	Introduction to DGPS.
8th Week	1st	Describe weissapach Triangle weis Quadrilateral methods.
	2nd	Explain Pricise Magnetic Correlation.

WEEK	DAY	TOPIC
8th Week	3rd	State elements of curves.
	4th	Define Designation of Curves, Simple Curves.
9th Week	1st	Define Designation of Curves, Compound and Reverse curves.
	2nd	Explain setting out of Surface Underground Curves by Chords and Offset.
	3rd	Explain setting out of Surface Underground Curves by tangent and Offset.
	4th	Explain setting out of Surface Underground Curves by plate layers methods.
10th Week	1st	Describe various setting out by chain and one theodolite, two theodolites.
	2nd	Describe various setting out by Chain.
	3rd	Describe various setting out by One Theodolite.
	4th	Describe various setting out by One Theodolite.
11th Week	1st	Describe various setting out by Chain two theodolites.
	2nd	Describe various setting out by Chain two theodolites.
	3rd	Define Supper elivation, Transition and Vertical Curves.
	4th	Define Supper elivation, Transition and Vertical Curves.
12th Week	1st	Explain Tape Triangulation, Instrumental Survey.
	2nd	Explain Instrumental Survey.
	3rd	Determine Stope face.
	4th	State preperation of Stope Planes.
13th Week	1st	State Plotting the Stope Station.
	2nd	State Plotting Stope Phase to the Mine Plan.
	3rd	Findout Area of Extraction by Planimeter and calculation of triangle thereof.
	4th	Explain the basic principle of Global Piositioning System.
14th Week	1st	Explain the basic principle of Global Piositioning System.
	2nd	Explain the basic principle of Total Station.
	3rd	Explain the basic principle of Total Station.
	4th	Introduction to DGPS.
15th Week	1st	INTERNAL.
	2nd	Previous year Question Discussion.
	3rd	Revision and Doubt clearing Class.
	4th	Revision and Doubt clearing Class.

S. Biswal
Signature of the faculty

16/01/2024
Signature of the Principal