

SYNERGY SCHOOL OF ENGINEERING, DHENKANAL
DEPARTMENT OF MINING ENGINEERING
LESSON PLAN

Discipline: MINING	Semester: 4th	Name of the Teaching faculty: BISWAMBAR MAJHI
Subject MINE SURVEY-II	No of Days/Week Class allotted; 4	Semester from Date: 16/01/24 To Date: 26/04/24 No of weeks: 15
Week	Class Day	Topics
1st	1st	Define stadia & its principle
	2nd	Define stadia & its principle
	3rd	Explain diaphragm
	4th	Explain reticules
2nd	1st	Explain dtacheometer
	2nd	Explain instruments constants
	3rd	Find out height & distance from stadia intercepts method
	4th	Find out height & distance from tangential systems
3rd	1st	Find out height & distance from movable hair method
	2nd	State purpose & principle involved in triangulation method
	3rd	State purpose & principle involved in trilateration method
	4th	Classify various methods of triangulation
4th	1st	Explain primary triangulation
	2nd	Explain triangulation
	3rd	CLASS TEST-
	4th	Explain tertiary colliery triangulation
5th	1st	Develop concept about reconnaissance survey
	2nd	Describe methods of measuring angle
	3rd	Types of the odolite used in triangulation survey
	4th	Describe the methods of baseline measurement using E.D.M.
6th	1st	Describe the methods of baseline measurement using E.D.M.
	2nd	Define tape correction
	3rd	State construction of triangulation station of permanent nature
	4th	State construction of triangulation station of permanent nature
7th	1st	State direct correlation by traversing methods
	2nd	State direct correlation by optical methods
	3rd	Describe orientation by wires in two shafts
	4th	Explain correlation by mines in vertical shafts
8th	1st	Explain correlation by mines in vertical shafts
	2nd	INTERNAL-I
	3rd	INTRODUCTION TO DGPS
	4th	Describe weisbach triangle & weis-quadrilateral methods
9th	1st	Explain precise magnetic correlation
	2nd	State elements of curves
	3rd	Define designation of curves, simple curves
	4th	Define designation of curves, compound & reverse curves

10th	1st	Explain setting out of surface&underground curves by chords & offsets	
	2nd	Explain setting out of surface & underground curves by tangentand offset	
	3rd	Explain setting out of surface&undergroundcurvesbyplatelayersmethod	
	4th	Describe various setting out by chain & one the odolite,two the odolites	
11th	1st	Describe various setting out by chain.	
	2nd	Describe various setting out by one the odolite	
	3rd	Describe various setting out by one the odolite	
	4th	Describe various setting out by chaint wotheodolites	
12th	1st	CLASSTEST-II	
	2nd	Describe various setting out by chain two the odolites	
	3rd	Define super elevation,transition and vertical curves	
	4th	Define super elevation,transition and vertical curves	
13th	1st	Explain tape triangulation,instrumental survey	
	2nd	Explain instrumental survey	
	3rd	Determin estope face	
	4th	Determine stope face	
14th	1st	State preparation of stope planes	
	2nd	State plotting the stopestation	
	3rd	INTERNAL-II	
	4th	State plotting of stope face to the mine plan	
15th	1st	Find out area of extraction by Planimeter and calculation of triangle there of	
	2nd	Explain the basic principles of global positioning system	
	3rd	Explain the basic principles of global positioning system	
	4th	Explain the basic principles of total station.	
Sl.No		Title of the Book	Name of Authors
1		Suveying Vol i	E.Mason
2		Suveying and Levelling	T.P.Kanetkar
3		Geodetic Surveying Voll	David Clerk
4		Mineral Economics	Sinha & Sharma


 Signature of faculty