

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: CE	Semester: 4 th	Name of the Teaching Faculty: Arpita Samal
Subject: Land Survey - I	No of Days/per week class allotted: 05	Semester from Date: 16.01.24 to Date: 26.04.24 No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st	Introduction - Def ⁿ , Aims & objectives
	2nd	Principles of survey, Types of survey
	3rd	accuracy of measurements, instruments
	4th	Types of tapes & chains
	5th	Error & mistakes in linear measurement
2nd	1st	Numericals
	2nd	Numericals
	3rd	Correction to measured lengths
	4th	Numerical
	5th	Numerical
3rd	1st	Equipment & accessories for chaining
	2nd	Ranging & its types
	3rd	Methods of chaining
	4th	- do -
	5th	Chaining across different obstacles
4th	1st	- do -
	2nd	- do -
	3rd	Purpose of chain surveying, effects
	4th	Errors in chain surveying
	5th	Numerical
5th	1st	- do -
	2nd	Measurement of angles with chain, tape
	3rd	- do - & compass
	4th	concept of meridians & bearings
	5th	- do -


Sign of Faculty

HOD


Principal

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline:	Semester:	Name of the Teaching Faculty:
CE	4 th	Arapita Samal
Subject:	No of Days/per week class allotted:	Semester from Date: to Date:
Survey - I	05	16.01.24 to Date: 26.09.24
Week	Class Day	Theory/Practical Topics
1st	1st	use of compasses in field
	2nd	Numericals
	3rd	- do -
	4th	- do -
	5th	dip of needle, magnetic declination
2nd	1st	Principles of traversing - open/closed
	2nd	Local attraction - Numericals
	3rd	Errors in compass surveying
	4th	levelling - R.L, B.M, datum
	5th	instruments used for levelling
3rd	1st	levelling Staff - BS, IS, FS, CP, HI
	2nd	Effects of curvature & refraction
	3rd	Numericals
	4th	reciprocal levelling
	5th	- do -
4th	1st	methods of levelling - Numericals
	2nd	- do -
	3rd	- do -
	4th	- do -
	5th	Errors in levelling & precautions
5th	1st	concepts/characteristics of contours
	2nd	methods of contouring
	3rd	Use of contour maps on CE projects
	4th	Computation of area from plans
	5th	Calculation of area by different methods


 Sig of Faculty

HOD

Principal

The Lesson
 Disciplin
 Sub:

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: CE	Semester: 4th	Name of the Teaching Faculty: Aspita Samal
Subject: Land Survey - I	No of Days/per week class allotted: 05	Semester from Date: _____ to Date: _____
Week	Class Day	Theory/Practical Topics
1st	1st	Calculation of volumes by prismatical
	2nd	Trapezoidal formula
	3rd	Theodolite Surveying
	4th	Transit theodolite
	5th	concept of transiting
2nd	1st	- do -
	2nd	measurement of magnetic bearings
	3rd	- do -
	4th	- do -
	5th	methods of theodolite traversing
3rd	1st	- do -
	2nd	- do -
	3rd	- do -
	4th	Traverse computation
	5th	- do -
4th	1st	- do -
	2nd	Closing error - Numericals
	3rd	- do -
	4th	Balancing of traverse
	5th	- do - [Bowditch's method]
5th	1st	- do - [Transit Method]
	2nd	Plane table Surveying
	3rd	instruments used in Plane table Survey
	4th	Methods of Plane table Survey
	5th	- do -


Sign of Faculty

HOD


Principal

SYNERGY POLYTECHNIC, BBSR

The Lesson Plan

Discipline: CE	Semester: 4th	Name of the Teaching Faculty: Arpita Samal
Subject: Land Survey - I	No of Days/per week class allotted: 05	Semester from Date: 16.01.24 to Date: 26.07.24 No of Weeks:
Week	Class Day	Theory/Practical Topics
1st	1st	Methods of Plane table Survey
	2nd	- do -
	3rd	- do -
	4th	- do -
	5th	Two point Problem
2nd	1st	Three Point Problem
	2nd	Errors in Plane table Survey
	3rd	Study of directing, scale, signs, symbols
	4th	Cadastral Map preparation
	5th	Unique Identification No. of parcel
3rd	1st	positions of existing control points
	2nd	- do -
	3rd	Adjacent Boundaries & features
	4th	Topology, creation & verification
	5th	- do -
4th	1st	
	2nd	
	3rd	
	4th	
	5th	
5th	1st	
	2nd	
	3rd	
	4th	
	5th	


Sign of Faculty

HOD


Principal