

# KIIT POLYTECHNIC, BHUBANESWAR

## LESSON PLAN

**Session** (2023-2024)

<b>Discipline : CIVIL ENGINEERING</b>	<b>Semester:4<sup>th</sup> sem,Summer/2024</b>	<b>Name of the Teaching Faculty: Chiranjeeb Mishra(Lecturer)</b> <b>Email ID: <a href="mailto:chiranjeeb.mishrafce@kp.kiit.ac.in">chiranjeeb.mishrafce@kp.kiit.ac.in</a></b>
Subject: Land Survey Practice-1(Pr.1)	No. Of Days/Week Class Allotted :07	Start Date :16/01/24 End Date:26/04/24
<b>Week</b>	<b>Class Day</b>	<b>Practical Topics</b>
1 <sup>st</sup>	1 <sup>st</sup>	To study about conventional signs used in survey.
	2 <sup>nd</sup>	To study about conventional signs used in survey.
2 <sup>nd</sup>	1 <sup>st</sup>	Record checking
	2 <sup>nd</sup>	To study about different types of equipments and accessories used in survey.
3 <sup>rd</sup>	1 <sup>st</sup>	Record checking/viva
	2 <sup>nd</sup>	Testing and adjusting of a metric chain. Measurement of distance between two points.
4 <sup>th</sup>	1 <sup>st</sup>	Testing and adjusting of a metric chain. Measurement of distance between two points.
/	2 <sup>nd</sup>	Measurement of distance between two points (more than 2 chain lengths apart) with chain including direct ranging. Setting out different types of triangles, given the lengths sides with chain and tape.
5 <sup>th</sup>	1 <sup>st</sup>	Measurement of distance between two points (more than 2 chain lengths apart) with chain including direct ranging. Setting out different types of triangles, given the lengths sides with chain and tape.
	2 <sup>nd</sup>	Repeat /record checking /viva
6 <sup>th</sup>	1 <sup>st</sup>	Measurement of distance by chaining across a obstacles on the chain line i) a pond ii)a building iii) a stream/ river (in the event of non-availability of stream / river, a pond or lake may be taken, considering that chaining around the same is not possible  Setting perpendicular offsets to various objects (at least 3) from a chain line using-(1) tape, (2) cross-staff, (3) optical square and comparing the accuracy of the 3 methods .
	2 <sup>nd</sup>	Testing and adjustment of Prismatic compass and Surveyor's compass . Record checking/viva

7th	1 <sup>st</sup>	Measurement of bearings of lines (at least 3 lines) and determination of included angle using Prismatic compass and Surveyor's compass. Setting out a closed traverse of 5 sides, using prismatic compass, given bearing of one line and included angles and lengths of sides.
	2 <sup>nd</sup>	Measurement of bearings of lines (at least 3 lines) and determination of included angle using Prismatic compass and Surveyor's compass. Setting out a closed traverse of 5 sides, using prismatic compass, given bearing of one line and included angles and lengths of sides.
8th	1 <sup>st</sup>	Record checking/viva
	2 <sup>nd</sup>	Setting up of Plane Table and Plotting five points by radiation method and five inaccessible points by intersection method Conducting Plane Table surveying in a given plot of area by traversing (Atleast a 5-sided traverse and locating the objects.
9th	1 <sup>st</sup>	Setting up of Plane Table and Plotting five points by radiation method and five inaccessible points by intersection method Conducting Plane Table surveying in a given plot of area by traversing (Atleast a 5-sided traverse and locating the objects.
	2 <sup>nd</sup>	Record checking/viva
10th	1 <sup>st</sup>	Plane table surveying by Resection method (two point & three point problem method). Measurement of horizontal angles (3nos.) by repetition and reiteration method and compare two methods
	2 <sup>nd</sup>	Plane table surveying by Resection method (two point & three point problem method). Measurement of horizontal angles (3nos.) by repetition and reiteration method and compare two methods
11th	1 <sup>st</sup>	Record checking/viva
	2 <sup>nd</sup>	Prolonging a given straight line with the help of a theodolite Determination of magnetic bearing of 3 given straight lines
12th	1 <sup>st</sup>	Prolonging a given straight line with the help of a theodolite Determination of magnetic bearing of 3 given straight lines
	2 <sup>nd</sup>	Record checking/viva Making temporary adjustments of Levels
13th	1 <sup>st</sup>	Determining Reduced Levels of five given points taking staff readings with Levels using level book. Locating contour points in the given area by direct method / indirect method.
	2 <sup>nd</sup>	Determining Reduced Levels of five given points taking staff readings with Levels using level book. Locating contour points in the given area by direct method / indirect method.
14th	1 <sup>st</sup>	Repeat / Record checking/viva
	2 <sup>nd</sup>	Conduct Fly Leveling (Compound) between two distant points with respect to R.L. of a given B.M. and reduction of levels by

		both height of collimation method and applying Arithmetic check. (At least 3 change points must be covered) by rise and fall method.
15th	1 <sup>st</sup>	Repeat/Record checking/viva
	2 <sup>nd</sup>	Repeat/Record checking/viva