



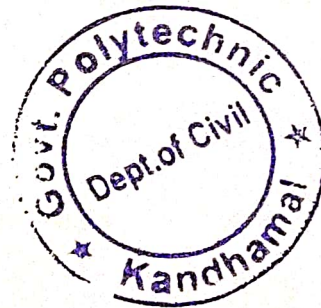
LESSON PLAN : PR-2. LAND SURVEY PRACTICE – II, SESSION -2025-2026 (SUMMER 2026) BATCH-2023-2026 (6th Semester)

Discipline: civil engineering	Semester: 6TH	Name of the Teaching Faculty: Ashish Nayak (Lect. Stage-II in Civil Engg.)
Subject: PR-2- LAND SURVEY PRACTICE – II	No. of days/ per week class allotted: 5	Semester From Date : 22-12-2025 to Date: 18-04-2026 No. of Weeks: 15
Week	Class Day	Theory/ Practical Topics
		1.0 TRIGONOMETRICAL SURVEYING & TACHEOMETRY:
1ST	1	1.1 Determination of height of 3 objects whose bases are accessible
	2	1.1 Determination of height of 3 objects whose bases are accessible
	3	1.1 Determination of height of 3 objects whose bases are accessible
	4	1.2 Determination of stadia constants
	5	1.2 Determination of stadia constants
2ND	1	1.2 Determination of stadia constants
	2	1.3 Determination of horizontal distance and elevation with Staff vertical, by stadia method
	3	1.3 Determination of horizontal distance and elevation with Staff vertical, by stadia method
	4	1.3 Determination of horizontal distance and elevation with Staff vertical, by stadia method
	5	1.3 Determination of horizontal distance and elevation with Staff vertical, by stadia method
		2.0 SETTING OUT CURVES AND SITE SURVEYING:
3RD	1	2.1 Setting out a simple circular curve by offsets from long chord 2.2 Setting out a simple circular curve by offsets from the tangent
	2	2.1 Setting out a simple circular curve by offsets from long chord 2.2 Setting out a simple circular curve by offsets from the tangent
	3	2.1 Setting out a simple circular curve by offsets from long chord 2.2 Setting out a simple circular curve by offsets from the tangent
	4	2.3 Setting out a simple circular curve by offsets from chords produces
	5	2.3 Setting out a simple circular curve by offsets from chords produces
4TH	1	2.4 Setting out a simple circular curve by Rankine's method of tangent angle (Deflection angles) Setting out a site the center line and foundation width of a building from the given plan
	2	2.4 Setting out a simple circular curve by Rankine's method of tangent angle (Deflection angles) Setting out a site the center line and foundation width of a building from the given plan
	3	2.5 Setting out the foundation line for a culvert
	4	2.5 Setting out the foundation line for a culvert
	5	2.6 Dividing an area into plots of given size
		3. STUDY OF MAP AND MAP SERIES:

5TH	1	3.1 Physical Map
	2	3.2 Topographic Map
	3	3.3 Road Map
	4	3.4 Political Map
	5	3.5 Economic & Resources Map
6TH	1	3.5 Economic & Resources Map
	2	3.6 Thematic Map
	3	3.7 Climate Map
	4	3.8 Open Series map and Defense Series Map
	5	3.8 Open Series map and Defense Series Map
		4. STUDY ON GPS & DGPS AND ETS:
7TH	1	4.1 GPS: - Global Positioning, GPS Signals, Errors of GPS, Positioning Methods
	2	4.1 GPS: - Global Positioning, GPS Signals, Errors of GPS, Positioning Methods
	3	4.1 GPS: - Global Positioning, GPS Signals, Errors of GPS, Positioning Methods
	4	4.2 DGPS: - Differential Global Positioning System
	5	4.2.1 Base Station Setup 4.2.2 Rover GPS Set up
8TH	1	4.2.1 Base Station Setup 4.2.2 Rover GPS Set up
	2	4.2.3 Download, Post-Process and Export GPS data
	3	4.2.3 Download, Post-Process and Export GPS data
	4	4.2.4 Sequence to download GPS data from flashcards
	5	4.2.4 Sequence to download GPS data from flashcards
		4.2.5 Sequence to Post-Process GPS data
	1	4.2.5 Sequence to Post-Process GPS data
9TH	2	4.2.6 Sequence to export post process GPS data
	3	4.2.6 Sequence to export post process GPS data
	4	4.2.7 Sequence to export GPS Time tags to file
	5	4.2.7 Sequence to export GPS Time tags to file
		4.3 ETS: - Electronic Total Station
10TH	1	4.3.1 Distance Measurement
	2	4.3.1 Distance Measurement
	3	4.3.2 Angle Measurement
	4	4.3.2 Angle Measurement
	5	4.3.3 Leveling
11TH	1	4.3.4 Determining position
	2	4.3.5 Reference networks
	3	4.3.5 Reference networks
	4	4.3.6 Errors and Accuracy
	5	4.3.6 Errors and Accuracy
		5. STUDY OF GIS AND MAP PREPARATION USING GIS
12TH	1	5.1 Components of GIS, Integration of Spatial and Attribute Information
	2	5.1 Components of GIS, Integration of Spatial and Attribute Information
	3	5.2 Three Views of Information System 5.2.1 Database or Table View, Map View and Model View
	4	5.2 Three Views of Information System 5.2.1 Database or Table View, Map View and Model View

	5	5.3 Spatial Data Model
13TH	1	5.4 Attribute Data Management and Metadata Concep
	2	5.4 Attribute Data Management and Metadata Concep
	3	5.5 Prepare data and adding to Arc Map.
	4	5.5 Prepare data and adding to Arc Map.
	5	5.6 Organizing data as layers.
14TH	1	5.7 Editing the layers.
	2	5.8 Switching to Layout View.
	3	5.8 Switching to Layout View.
	4	5.9 Change page orientation.
	5	5.9 Change page orientation.
15TH	1	5.10 Removing Borders
	2	5.11 Adding and editing map information.
	3	5.11 Adding and editing map information.
	4	5.12 Finalize the map
	5	5.12 Finalize the map

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