


## LAND SURVEY PRACTICE – II

Sl. No.	Name of The Experiment	Photo	List of Equipment
<b>1.0 TRIGONOMETRICAL SURVEYING &amp; TACHEOMETRY:</b>			
	1.1 Determination of height of 3 objects whose bases are accessible		1. Theodolite 2. Tripod Stand 3. Tape 4. Pegs 5. Arrows
	1.2 Determination of stadia constants		
	1.3 Determination of horizontal distance and elevation with Staff vertical, by stadia method		
<b>2.0 SETTING OUT CURVES AND SITE SURVEYING:</b>			
	2.1 Setting out a simple circular curve by offsets from long chord		1. Theodolite 2. Tripod Stand 3. Tape 4. Pegs 5. Arrows
	2.2 Setting out a simple circular curve by offsets from the tangent		
	2.3 Setting out a simple circular curve by offsets from chords produces		
	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		
	2.5 Setting out the foundation line for a culvert		
	2.6 Dividing an area into plots of given size		
<b>3. STUDY OF MAP AND MAP SERIES:</b>			
	3.1 Physical Map		Maps
	3.2 Topographic Map		
	3.3 Road Map		
	3.4 Political Map		
	3.5 Economic & Resources Map		
	3.6 Thematic Map		
	3.7 Climate Map		
	3.8 Open Series map and Defense Series Map		
<b>4. STUDY ON GPS &amp; DGPS AND ETS:</b>			
	4.1 GPS: - Global Positioning, GPS Signals, Errors of GPS, Positioning Methods		1. DGPS 2. Rover 3. Base Station
	4.2 DGPS: - Differential Global		

	Positioning System		4. Tripod
	4.2.1 Base Station Setup		<ol style="list-style-type: none"> <li>1. Total Station</li> <li>2. Prism</li> <li>3. Stand</li> <li>4. Tape</li> </ol>
	4.2.2 Rover GPS Set up		
	4.2.3 Download, Post-Process and Export GPS data		
	4.2.4 Sequence to download GPS data from flashcards		
	4.2.5 Sequence to Post-Process GPS data		
	4.2.6 Sequence to export post process GPS data		
	4.2.7 Sequence to export GPS Time tags to file		
	4.3 ETS: - Electronic Total Station		
	4.3.1 Distance Measurement		
	4.3.2 Angle Measurement		
	4.3.3 Leveling		
	4.3.4 Determining position		
	4.3.5 Reference networks		
	4.3.6 Errors and Accuracy		
<b>5. STUDY OF GIS AND MAP PREPARATION USING GIS</b>			
	5.1 Components of GIS, Integration of Spatial and Attribute Information		1. GIS Software
	5.2 Three Views of Information System		
	5.2.1 Database or Table View, Map View and Model View		
	5.3 Spatial Data Model		
	5.4 Attribute Data Management and Metadata Concept		
	5.5 Prepare data and adding to Arc Map.		
	5.6 Organizing data as layers.		