

# LESSON PLAN

BRANCH-CIVIL ENGG			NAME-ANITA PRADHAN		
Subject:LAND SURVEY-II(TH-I)			Semester From Date:16-01-2024 To Date 26-04-2024		
SEMESTER-6th		No. Of Weeks:17			5P/WEEK
No. of Days/week class allotted:04 period per week(Mon,Tue,Thu, Sat-1 Period each)					TOTAL PERIOD-75
MONTH	Week	DATE	DAYS	Syllabus to be covered	NO. OF PERIODS AVAILABLE
				<b>TACHEOMETRY:</b>	<b>9</b>
<b>J A N U A R Y</b>	<b>3rd</b>	16/1/2024	TUE	Introduction	1
		16/1/2024	TUE	Principles, stadia constants determination	1
		18/1/2024	THUS	Principles, stadia constants determination	1
		20/1/2024	SAT	Stadia tacheometry with staff held vertical and with line of collimation horizontal	1
	<b>4th</b>	22/1/2024	MON	Stadia tacheometry with staff held vertical and with line of collimation inclined	1
		25/1/2024	THUS	Numerical problems	1
		27/1/2024	SAT	Elevations and distances of staff stations	1
	<b>5th</b>	29/1/2024	MON	Numerical problems	1
		30/1/2024	TUE	Numerical problems	1
				<b>CURVES</b>	<b>8</b>
		30/1/2024	TUE	Introduction	1
	<b>1st</b>	1/2/2024	THUS	Compound, reverse and transition curve, Purpose	1
3/2/2024		SAT	Elements of circular curves	1	
5/2/2024		MON	Numerical problems	1	
6/2/2024		TUE	Preparation of curve table for setting out	1	
6/2/2024		TUE	Preparation of curve table for setting out	1	
8/2/2024		THUS	Setting out of circular curve by chain and tape and by instrument angular methods (i)offsets from long	1	
10/2/2024		SAT	Setting out of circular curve by chain and tape and by instrument angular methods (i)offsets from long	1	
			<b>BASICS ON SCALE AND BASICS OF MAP:</b>	<b>8</b>	
		12/2/2024	MON	Fractional or Ratio Scale, Linear Scale, Graphical Scale	1

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3rd	13/2/2024	TUE	What is Map, Map Scale and Map Projections	1	
	13/2/2024	TUE	How Maps Convey Location and Extent	1	
	15/2/2024	THUS	How Maps Convey characteristics of features	1	
	17/2/2024	SAT	How Maps Convey Spatial Relationship	1	
4th	19/2/2024	MON	Classification of Maps- Physical Map ,Topographic Map,Road Map,Political Map, Economic & Resources Map,Thematic Map,Climate Map	1	
	20/2/2024	TUE	Classification of Maps- Physical Map ,Topographic Map,Road Map,Political Map, Economic & Resources Map,Thematic Map,Climate Map	1	
	20/2/2024	TUE	Classification of Maps- Physical Map ,Topographic Map,Road Map,Political Map, Economic & Resources Map,Thematic Map,Climate Map	1	
			<b>SURVEY OF INDIA MAP SERIES</b>	10	
	22/2/2024	THUS	Open Series map	1	
	24/2/2024	SAT	Open Series map	1	
	5th	26/2/2024	MON	Defense Series Map	1
27/2/2024		TUE	Defense Series Map	1	
27/2/2024		TUE	Map Nomenclature, Quadrangle Name	1	
29/2/2024		THUS	Latitude, Longitude, UTM's	1	
1st	2/3/2024	SAT	Contour Lines	1	
	2nd	4/3/2024	MON	Magnetic Declination	1
		7/3/2024	THUS	Public Land Survey System	1
		9/3/2024	SAT	Field Notes	1
			<b>BASICS OF AERIAL PHOTOGRAPHY, PHOTOGRAMMETRY, DEM AND ORTHO IMAGE GENERATION</b>	10	
	11/3/2024	MON	Aerial Photography:	1	
		12/3/2024	TUE	Film, Focal Length, Scale	1
		12/3/2024	TUE	Types of Aerial Photographs (Oblique, Straight)	1
		14/3/2024	THUS	Photogrametry,Classification of Photogrammetry	1

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3rd	16/3/2024	SAT	Aerial Photogrammetry, Terrestrial Photogrammetry	1	
	4th	18/3/2024	MON	Acquisition of Imagery using aerial and satellite platform	1
		19/3/2024	TUE	Control Survey	1
		19/3/2024	TUE	Geometric Distortion in Imagery	1
		21/3/2024	THUS	DTM/DEM Generation	1
		23/3/2024	SAT	Ortho Image Generation	1
		<b>MODERN SURVEYING METHODS :</b>			10
	5th	28/3/2024	THUS	Principles	1
		30/3/2024	SAT	features and use of (i) Micro-optic theodolite, digital theodolite	1
	1st	2/4/2024	TUE	features and use of (i) Micro-optic theodolite, digital theodolite	1
2/4/2024		TUE	Working principles of a Total Station (Set up and use of total station to measure angles, distances of points under survey from total station and the co-ordinates (X,Y & Z or northing, easting, and elevation) of surveyed points relative to Total Station position using trigonometry and triangulation.	1	
4/4/2024		THUS	Working principles of a Total Station (Set up and use of total station to measure angles, distances of points under survey from total station and the co-ordinates (X,Y & Z or northing, easting, and elevation) of surveyed points relative to Total Station position using trigonometry and triangulation.	1	
6/4/2024		SAT	Working principles of a Total Station (Set up and use of total station to measure angles, distances of points under survey from total station and the co-ordinates (X,Y & Z or northing, easting, and elevation) of surveyed points relative to Total Station position using trigonometry and triangulation.	1	
8/4/2024		MON	Working principles of a Total Station (Set up and use of total station to measure angles, distances of points under survey from total station and the co-ordinates (X,Y & Z or northing, easting, and elevation) of surveyed points relative to Total Station position using trigonometry and triangulation.	1	

2nd	9/4/2024	TUE	Working principles of a Total Station (Set up and use of total station to measure angles, distances of points under survey from total station and the co-ordinates (X,Y & Z or northing, easting, and elevation) of surveyed points relative to Total Station position using trigonometry and triangulation.	1
	9/4/2024	TUE	Working principles of a Total Station (Set up and use of total station to measure angles, distances of points under survey from total station and the co-ordinates (X,Y & Z or northing, easting, and elevation) of surveyed points relative to Total Station position using trigonometry and triangulation.	1
	13/4/2024	SAT	Working principles of a Total Station (Set up and use of total station to measure angles, distances of points under survey from total station and the co-ordinates (X,Y & Z or northing, easting, and elevation) of surveyed points relative to Total Station position using trigonometry and triangulation.	1
			<b>BASICS ON GPS &amp; DGPS AND ETS:</b>	10
			<b>GPS-Global positioning system</b>	
3rd	15/4/2024	MON	GPS: - Global Positioning 7.1.1 Working Principle of GPS,GPS Signals 7.1.2 Errors of GPS,Positioning Methods	1
			<b>DGPS: - Differential Global Positioning System</b>	
	16/4/2024	TUE	7.2.1 Base Station Setup,7.2.2 Rover GPS Set up	1
	16/4/2024	TUE	7.2.3 Download, Post-Process and Export GPS data	1
	18/4/2024	THUS	7.2.4 Sequence to download GPS data from flashcards	1
	20/4/2024	SAT	7.2.5 Sequence to Post-Process GPS data	1
4th	22/4/2024	MON	7.2.6 Sequence to export post process GPS data,7.2.7 Sequence to export GPS Time tags to file	1
			<b>ETS: - Electronic Total Station</b>	
	23/4/2024	TUES	7.3.1 Distance Measurement ,7.3.2 Angle Measurement	1
	23/4/2024	TUES	7.3.3 Leveling	1
	25/04/2024	THUS	7.3.4 Determining position	1

		7.3.5 Reference networks ,7.3.6 Errors and Accuracy	1
		<b>USING GIS</b>	10
		8.1 Components of GIS, Integration of Spatial and Attribute Information	1
		8.2 Three Views of Information System,8.2.1 Database or Table View, Map View and Model View	1
		8.3 Spatial Data Model ,8.4 Attribute Data Management and Metadata Concept	1
		8.5 Prepare data and adding to Arc Map.	1
		8.6 Organizing data as layers	1
		8.7 Editing the layers.	1
		8.8 Switching to Layout View.	1
		Borders.	1
		8.11 Adding and editing map information.	1
		8.12 Finalize the map	1