LESSON PLAN

BRANCH-CIVIL ENGG				NAME-ANITA PRADHAN	
Subject:LAND SURVEY-II(TH-I)				Semester From Date:10-03-2022 To Date 10-06-2022	
SEMESTER-6th				No. Of Weeks:	5P/WEEK
No. of Days/week class allotted:05 period per week(Mon,Tue,Wed,Thu, Sat-1 Period each)					TOTAL PERIOD-75
MONTH	**Week**	**DATE**	**DAYS**	**Syllabus to be covered**	**NO. OF PERIODS AVAILABLE**
				TACHEOMETRY:	9
MARCH	2nd	10-03-2022	THUS	Introduction	1
		12-03-2022	SAT	Principles, stadia constants determination	1
	3rd	14/03/22	MON	Stadia tacheometry with staff held vertical and with line of collimation horizontal	1
		15/03/22	TUE	Stadia tacheometry with staff held vertical and with line of collimation inclined	1
		16/03/22	WED	Numerical problems	1
		17/03/22	THUS	Elevations and distances of staff stations	1
		19/03/22	SAT	Numerical problems	1
	4th	21/03/22	MON	Numerical problems	1
				CURVES	8
		22/03/22	TUE	Introduction	1
		23/03/22	WED	Compound, reverse and transition curve, Purpose & use of different types of curves in field	1
		24/03/22	THUS	Elements of circular curves	1
		26/03/22	SAT	Numerical problems	1
	5th	28/03/22	MON	Preparation of curve table for setting out	1
		29/03/22	TUE	Setting out of circular curve by chain and tape and by instrument angular methods (i)offsets from long chord,(ii)successive bisection of arc,(iii)offsets from tangents,(iv)offsets chord produced,(v)Rankine's method of tangent angles	1
		30/03/22	WED	Setting out of circular curve by chain and tape and by instrument angular methods (i)offsets from long chord,(ii)successive bisection of arc,(iii)offsets from tangents,(iv)offsets chord produced,(v)Rankine's method of tangent angles	1
		31/03/22	THUS	Obstacles in curve ranging – point of intersection inaccessible	1
				BASICS ON SCALE AND BASICS OF MAP:	8
	1st	02-04-2022	SAT	Fractional or Ratio Scale, Linear Scale, Graphical Scale	1

APRIL	2nd	04-04-2022	MON	What is Map, Map Scale and Map Projections	1
		05-04-2022	TUE	How Maps Convey Location and Extent	1
		06-04-2022	WED	How Maps Convey characteristics of features	1
		07-04-2022	THUS	How Maps Convey Spatial Relationship	1
		09-04-2022	SAT	Classification of Maps- Physical Map ,Topographic Map,Road Map,Political Map, Economic & Resources Map,Thematic Map,Climate Map	1
	3rd	11-04-2022	MON	Classification of Maps- Physical Map ,Topographic Map,Road Map,Political Map, Economic & Resources Map,Thematic Map,Climate Map	1
				SURVEY OF INDIA MAP SERIES	10
		12-04-2022	TUE	Open Series map	1
		13/4/22	WED	Open Series map	1
		16/4/22	SAT	Defense Series Map	1
		18/4/22	MON	Defense Series Map	1
	4th	19/4/22	TUE	Map Nomenclature, Quadrangle Name	1
		20/4/22	WED	Latitude, Longitude, UTM's	1
		21/4/22	THUS	Contour Lines	1
		23/4/22	SAT	Magnetic Declination	1
		25/4/22	MON	Public Land Survey System	1
	5th	26/4/22	TUE	Field Notes	1
				BASICS OF AERIAL PHOTOGRAPHY, PHOTOGRAMMETRY, DEM AND ORTHO IMAGE GENERATION	10
		27/4/22	WED	Aerial Photography:	1
		28/4/22	THUS	Film, Focal Length, Scale	1
		30/4/22	SAT	Types of Aerial Photographs (Oblique, Straight)	1
	1st	02-05-2022	MON	Photogrametry,Classification of Photogrammetry	1
		04-05-2022	WED	Aerial Photogrammetry,Terrestrial Photogrammetry	1
		05-05-2022	THUS	Acquisition of Imagery using aerial and satellite platform	1
		07-05-2022	SAT	Control Survey	1
		09-05-2022	MON	Geometric Distortion in Imagery	1
	2nd	10-05-2022	TUE	DTM/DEM Generation	1
		11-05-2022	WED	Ortho Image Generation	1
				MODERN SURVEYING METHODS :	10
		12-05-2022	THUS	Principles	1
		14/5/22	SAT	features and use of (i) Micro-optic theodolite, digital theodolite	1
		16/5/22	MON	features and use of (i) Micro-optic theodolite, digital theodolite	1

MAY	3rd	17/5/22	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
		18/5/22	WED	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
		19/5/22	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
		21/5/22	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
		23/5/22	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
	4th	24/5/22	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
		25/5/22	WED	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
				BASICS ON GPS & DGPS AND ETS:	10
				GPS-Global positioning system	

		26/5/22	THUS	GPS: - Global Positioning 7.1.1 Working Principle of GPS,GPS Signals 7.1.2 Errors of GPS,Positioning Methods	1
				DGPS: - Differential Global Positioning System	
		28/5/22	SAT	7.2.1 Base Station Setup,7.2.2 Rover GPS Set up	1
	5th	31/5/22	TUE	7.2.3 Download, Post-Process and Export GPS data	1
JUNE	1st	01-06-2022	WED	7.2.4 Sequence to download GPS data from flashcards	1
		02-06-2022	THUS	7.2.5 Sequence to Post-Process GPS data	1
		04-06-2022	SAT	7.2.6 Sequence to export post process GPS data,7.2.7 Sequence to export GPS Time tags to file	1
				ETS: - Electronic Total Station	
	2nd	06-06-2022	MON	7.3.1 Distance Measurement ,7.3.2 Angle Measurement	1
		07-06-2022	TUE	7.3.3 Leveling	1
		08-06-2022	WED	7.3.4 Determining position	1
		09-06-2022	THUS	7.3.5 Reference networks ,7.3.6 Errors and Accuracy	1
EXTRA CLASS				**BASICS OF GIS AND MAP PREPARATION USING GIS**	10
			SAT	8.1 Components of GIS, Integration of Spatial and Attribute Information	1
			MON	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
				8.9 Change page orientation.8.10 Removing Borders.	1
				8.11 Adding and editing map information.	1
				8.12 Finalize the map	1