



**ANDHI SCHOOL OF ENGINEERING**  
**BHABANDHA, BERHAMPUR**

BRANCH- CIVIL ENGINEERING

SEMESTER- 6th

SUBJECT- Th 1. LAND SURVEY- II

NAME OF THE FACULTY- ER.ROJALI PATRA & ER. SWADHIN MUND

		Topic to be taken			Actual topic taken			
Sl. No	Topic/ Module	No. of period	Details of the topics	Date	Topic No.	Topic Name	Date	Remarks
1	TACHEOMETRY	9	1.1 Principles, stadia constants determination 1.2 Stadia tacheometry with staff held vertical and with line of collimation horizontal or inclined, numerical problems 1.3 Elevations and distances of staff stations – numerical problems	13.02.2023 - 02.03.2023	1.1 1.2 1.3	Principles, stadia constants determination Stadia tacheometry with staff held vertical and with line of collimation horizontal or inclined, numerical problems Elevations and distances of staff stations – numerical problems	13.02.2023 14.02.2023 17.02.2023 13.03.2023 14.03.2023 17.03.2023 20.03.2023 21.03.2023	

2	CURVES	8	<p>2.1 compound, reverse and transition curve, Purpose &amp; use of different types of curves in field</p> <p>2.2 Elements of circular curves, numerical problems</p> <p>2.3 Preparation of curve table for setting out</p> <p>2.4 Setting out of circular curve by chain and tape and by instrument angular methods.</p> <p>2.5 Obstacles in curve ranging – point of intersection inaccessible</p>	<p>04.03.2023</p> <p>-</p> <p>16.03.2023</p>	2.1	Compound, reverse and transition curve, Purpose & use of different types of curves in field	27.03.2023	
							28.03.2023	
					2.2	Elements of circular curves, numerical problems	03.04.2023	
							04.04.2023	
					2.3	Preparation of curve table for setting out	10.04.2023	
		11.04.2023						
		21.04.2023						
		24.04.2023						




3	BASICS ON SCALE AND BASICS OF MAP	8	3.1 Fractional or Ratio Scale, Linear Scale, Graphical Scale 3.2 What is Map, Map Scale and Map Projections 3.3 How Maps Convey Location and Extent 3.4 How Maps Convey characteristics of features 3.5 How Maps Convey Spatial Relationship 3.5.1 Classification of Maps 3.5.1 Physical Map 3.5.2 Topographic Map 3.5.3 Road Map 3.5.4 Political Map 3.5.5 Economic & Resources Map 3.5.6 Thematic Map 3.5.7 Climate Map	17.03.2023 - 23.03.2023	3.1 Fractional or Ratio Scale, Linear Scale, Graphical Scale 3.2 What is Map, Map Scale and Map Projections 3.3 How Maps Convey Location and Extent 3.4 How Maps Convey characteristics of features 3.5 How Maps Convey Spatial Relationship 3.5.1 Classification of Maps 3.5.1 Physical Map 3.5.2 Topographic Map 3.5.3 Road Map 3.5.4 Political Map 3.5.5 Economic & Resources Map 3.5.6 Thematic Map 3.5.7 Climate Map	25.04.2023 28.04.2023 01.05.2023 02.05.2023 08.05.2023	
4	SURVEY OF INDIA MAP SERIES	10	4.1 Open Series map 4.2 Defense Series Map 4.3 Map Nomenclature 4.3.1 Quadrangle Name 4.3.2 Latitude, Longitude, UTM's 4.3.4 Contour Lines 4.3.5 Magnetic Declination 4.3.6 Public Land Survey System 4.3.7 Field Notes	24.03.2023 - 04.04.2023	4.1 Open Series map 4.2 Defense Series Map 4.3 Map Nomenclature 4.3.1 Quadrangle Name 4.3.2 Latitude, Longitude, UTM's 4.3.4 Contour Lines 4.3.5 Magnetic Declination 4.3.6 Public Land Survey System 4.3.7 Field Notes	09.05.2023 12.05.2023 22.05.2023 23.05.2023	

5	BASICS OF AERIAL PHOTOGRAPHY PHOTOGRAMMETRY, DEM AND ORTHO IMAGE GENERATION	10	5.1 Aerial Photography 5.2 Photogrammetry 5.3 Photogrammetry Process 5.4 DTM/DEM Generation 5.5 Ortho Image Generation	06.04.2023- 20.04.2023	5.1	Aerial Photography	16.02.2023	
					5.2	Photogrammetry	02.03.2023	
					5.3	Photogrammetry Process	04.03.2023	
					5.4	DTM/DEM Generation	09.03.2023 11.03.2023	
					5.5	Ortho Image Generation		
6	MODERN SURVEYING METHODS	10	6.1 Principles, features and use of (i) Micro-optic theodolite, digital theodolite 6.2 Working principles of a Total Station.	21.04.2023 - 29.04.2023	6.1	Principles, features and use of (i) Micro-optic theodolite, digital theodolite	16.03.2023 18.03.2023 23.03.2023 25.03.2023 06.04.2023	
					6.2	Working principles of a Total Station.		
7	BASICS ON GPS & DGPS AND ETS	10	7.1 GPS: - Global Positioning 7.1 DGPS: - Differential Global Positioning System 7.3 ETS: - Electronic Total Station	01.05.2023 - 09.05.2023	7.1	GPS: - Global Positioning	12.04.2023	
					7.2	DGPS: - Differential Global Positioning System	13.04.2023	
					7.3	ETS: - Electronic Total Station	20.04.2023 27.04.2023 29.04.2023 04.05.2023	



8	BASICS OF GIS AND MAP PREPARATION USING GIS	10	8.1 Components of GIS, Integration of Spatial and Attribute Information		8.1	Components of GIS, Integration of Spatial and Attribute Information	06.05.2023
			8.2 Three Views of Information System		8.2	Three Views of Information System	11.05.2023
			8.3 Spatial Data Model		8.3	Spatial Data Model	
			8.4 Attribute Data Management and Metadata Concept		8.4	Attribute Data Management and Metadata Concept	13.05.2023
			8.5 Prepare data and adding to Arc Map.	11.05.2023	8.5	Prepare data and adding to Arc Map.	18.05.2023
			8.6 Organizing data as layers.	-	8.6	Organizing data as layers.	
			8.7 Editing the layers.	23.05.2023	8.7	Editing the layers.	20.05.2023
			8.8 Switching to Layout View.		8.8	Switching to Layout View.	
			8.9 Change page orientation.		8.9	Change page orientation.	
			8.10 Removing Borders.		8.10	Removing Borders.	
			8.11 Adding and editing map information.		8.11	Adding and editing map information.	
			8.12 Finalize the map		8.12	Finalize the map	

  
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