

LAND SURVEY-II

DISCIPLINE	SEMESTER	NAME OF THE TEACHING FACULTY
CIVIL ENGINEERING	- 3RD 6th	SJ. ROSY TIRKEY
SUBJECT :-	NO. OF DAYS / PER WEEK CLASS	SEMESTER FROM DATE :- 13.02.2023
LAND SURVEY-II	ALLOTTE :-	TO DATE :- 23.05.2023
	05.	NO OF WEEKS :- 14

WEEK	CLASS DAY	THEORY
1st week 18.02.2023 to 17.02.2023	1st →	<u>Tacheometry :-</u> Only concepts : applications without derivation. Principles stadia constants determination.
	2nd →	Stadia tacheometry with staff held vertical and with line of collimation horizontal or inclined numerical problems.
	3rd →	Numerical problems
	4th →	Numerical problems
	5th →	Numerical problems.

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17/02/23

<p>2nd week 20.2.2023 to 25.2.2023</p>		<p>1st → Equations and distance of staff stations - numerical problems</p>
		<p>2nd → Numerical problems</p>
		<p>3rd → Numerical problem</p>
		<p>4th → Numerical problems.</p>
<p><u>Curves:-</u></p>		
<p>2nd week 27.02.2023 to 04.03.2023</p>		<p>5th → Compound, reverse and transition curve, purpose & use of different types of curves in field</p>
		<p>1st → Elements of circular curves numerical problems</p>
		<p>2nd → Numerical problem.</p>
		<p>3rd → Numerical problem.</p>
		<p>4th → Numerical problem.</p>
		<p>5th → Preparation of curve table for setting out.</p>
<p>4th week 06.03.2023 to 11.03.2023</p>		<p>1st → setting out of circular curve by chain and tape.</p>

Signature..... *[Signature]*
09/03/23

by instrument angular methods

i) effects from long chord (ii)

Successive bisection of arc

and → (ii) effects from tangents (iv) effects from chord produced (v) Rankine's method of tangent angles (No derivation)

and → Obstacles in curve ranging - point of intersection inaccessible

Basics on scale and basic of map:

4th → Fractional or Ratio scale, linear scale, graphical scale.

5th → What is map, Map scale and Map projections

5th week
 17.03.2023
 to
 18.03.2023

1st → How maps convey location and extent.

and → How maps convey characteristics of features.

6th week
 20.03.2023
 to

1st → How maps convey spatial relationship.

25.03.2023

Classification of maps

Signature..... *Praseetha*
 20/03/23

	2nd →	Physical map Topographic map
	3rd →	Road map
	4th →	Political map
	5th	Economic & Resources map
7th week 27.08.2023 to 31.08.2023	1st	Thematic map
	2nd	Climate map
		<u>Survey of India map series:</u>
	3rd	Open series map
	4th	Defence series map
8th week 3.04.2023 to 8.04.2023		Map Nomenclature
	1st →	Quadrangle name
		Latitude, Longitude etc.
		Contour lines.
		Magnetic declination

Signature..... Prasanth
8/04/23

2nd → Public land survey system
field notes.

3rd → Base of aerial photography,
photo geometry, DEM and
ortho image generation :-

Aerial photography

film, focal length, scale

Types of aerial photographs (Oblique
straight)

4th → Photogrammetry

Classification of photogrammetry

Aerial photogrammetry

Terrestrial photogrammetry

5th → Photogrammetry process :-

Acquisition of imagery using
aerial and ~~sat~~ satellite platform

9th week .
10.04.2023
to
15.04.2023

1st → Control survey

Geotechnical Distortion in Imagery

Signature..... Aravind
16/04/23

2nd → Application of Imagery and its support data

3rd → Orientation and measurement

19.9.1 X - parallel

19.2.2.4 - Parallel

4th → DTM/DEM Generation

5th → Ortho Image Generation.

10th week
17.04.2023
to
22.04.2023

Modern surveying methods:-

1st → Principles, features and use of
(i) Micro-optic theodolite,
digital theodolite.

2nd → 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.

Signature..... *Zoya Turkey*
15/04/23

2nd →

Basics on GPS & DGPS
And etc:

GPS: Global positioning

Working principle of GPS-GPS
signals.

4th →

Errors of GPS. positioning
methods.

DGPS: Different global
positioning system

5th →

Base station setup.

11th week.

24-04-2023

to

29-04-2023

1st →

Rover GPS set up

Download post-process and
export GPS data.

2nd →

Sequence to download GPS data
from flashcards

Sequence to post process GPS data

3rd →

Sequence to export post-process
GPS data.

Sequence to export GPS time
tags to file.

Signature.....

Prasanna
26/4/23

	3rd →	Prepare data and adding to Arc map.
		Organizing data as layers.
	4th →	Editing the layers.
		Switching to layout view.
	5th →	Change page orientation
		Removing Borders
		Adding and editing map information.
		Finalize the map.
14th week		
15.05.2023	1st →	Revision
to		
23.05.2023	2nd →	Revision
	3rd →	Revision
	4th →	Revision
	5th →	Revision

Signature..... *[Signature]*
 23.05/23