



**TENTATIVE TEACHING PLAN (THEORY)**

Department: **Civil Engineering**

Name of Teacher: **Engr. Samar Hussain Rizvi**

Subject: **Surveying-II** Course Code: **CE202** Batch: **21CE - B**

Year: **2nd** Semester: **4th**

Semester Starting Date: **03-07-2023**

Semester Suspension Date: **20-10-2023**

**Course Learning Outcomes (CLOs):** Upon successful completion of the course, the student will be able to:

CLO	Description	Taxonomy Level	PLO
1	APPLY different survey techniques for indirect linear measurements in horizontal and vertical plane, and measurements in water bodies and larger areas.	C3	2
2	USE data for setting out of curves on highways and setting out works for different structures.	C3	3

S #	Topic	CLO's	No: of lecture/hrs. required
1.	Introduction to Surveying.	1	1
2.	Theodolite, its types and uses-Theodolite traversing.	1	2
3.	Latitudes, Departures and Coordinates of points. Traverse Computations	1	2
4.	Closing error and its adjustment-Balancing of a Traverse.	1	2
5.	Omitted measurements	1	1
6.	Examples / problems on omitted measurements	1	2
7.	Tacheometric survey	1	1
8.	System of Tacheometric Surveying	1	2
9.	Use of Tacheometric Surveying for traversing and related problems.	1	2
10.	Introduction to curves, types of curves- Elements of simple circular curve	2	2
11.	Degree of curve, relationship b/w degree & radius of curve	2	2
12.	Setting out of simple circular curve by different methods	2	3
13.	Problems on setting out of simple circular curve	2	2
14.	Compound curve, elements of compound curve	2	2
15.	Setting out of compound curve- Problems on Compound curve	2	2
16.	Reverse curve, elements of reverse curve. Problems on reverse curve	2	2
17.	Transition curve. Elements of transition curve.	2	2
18.	Setting out of Transition Curve and problems on Transition curve	2	2
19.	Vertical curves. Types of vertical curves. Problems on vertical curves	2	2
20.	Setting out Works. Setting out of buildings, roads, culvert & bridges.	2	2
21.	Trigonometric leveling and determination of R.L of elevated objects.	1	2
22.	Hydrographic surveying and its applications.	1	2
23.	Soundings and instrument used in soundings.	1	2
24.	Photographic surveying. Terrestrial and Arial surveying.	1	2
25.	Remote sensing and G.P.S. Use of GPS in the field of surveying.	1	2
<b>Total Lectures</b>			<b>48</b>

Signature of Teacher:

Dated: 03-07-2023

Remarks of DMRC: **APPROVED**

Signature of Chairman

Dated: 01-08-2023