

TENTATIVE TEACHING PLAN (THEORY)Department: **Civil Engineering**Name of Teacher: **Prof. Dr. Tauha Hussain Ali/Engr. Muhammad Saleem Raza**Subject: **Civil Engineering Materials**Course Code: **CE106**Batch: **23CE (A+B+C+D)**Year: **First**Semester **1st**Semester Starting Date: **15-08-2023**Semester Suspension Date: **24-11-2023****Course Learning Outcomes:**

After completing the 'Civil Engineering Materials' course, each student will be able to:

CLO	Description	Taxonomy Level	PLO
1	EXPLAIN various materials and their physical characteristics used in different types of civil engineering works.	C2	1
2	ILLUSTRATE the suitability of different materials and their behavior for their use in civil engineering projects.	C3	4

S. No	Topic	CLO	No. of Lecture hours Required
1.	Introduction and overview of the subject	1	1
2.	Civil engineering materials, properties, and types	1	1
3.	Stone & its classification, varieties, characteristics, and strength	1	2
4.	Uses of stones	2	1
5.	Quarrying and dressing of stones	1	1
6.	Different quality tests for stones	1	1
7.	Aggregates, their types, characteristics, classification & quality test	1	1
8.	General characteristics & varieties of bricks	1	1
9.	Manufacturing process of bricks	1	1
10.	Uses of bricks	2	1
11.	Tiles, kinds of tiles and manufacture of tiles	1	2
12.	Uses of tiles	2	1
13.	Cement and its composition	1	1
14.	Manufacture of cement	1	1
15.	Types of cement and its quality tests	1	2
16.	Manufacture of concrete, varieties, and properties	1	2
17.	Applications of concrete	2	2
18.	Lime, source of lime, manufacture, and classification of lime	1	1
19.	Timber, types and defects	1	1
20.	Identification, methods of seasoning, sawing	1	2
21.	Decay, preservation of timber & laminated material	1	1
22.	Uses of timber and timber products	2	1

23.	Composition and classification of glass, properties, and types	1	1
24.	Commercial varieties and uses of glass	2	1
25.	Ferrous & Non-ferrous metals and alloys, iron & its types	1	2
26.	Reinforced steel bar, steel copper, tin, aluminum, nickel, brass	1	1
27.	Uses of steel and aluminum in construction	2	1
28.	Concrete paver blocks	1	1
29.	Uses of paver blocks	2	1
30.	Preparation, properties, and defects of paints	1	2
31.	Plastics, varnishes & distempers	1	1
32.	Uses of paints and varnishes	2	1
33.	Bitumen/asphalt and tar	1	1
34.	Uses of bitumen, asphalt, and tar	2	1
35.	Plastics, fiber glass	1	1
36.	Classification of plastics	1	1
37.	Uses of plastics	2	2
38.	Asbestos & gypsum	1	2
Total Lecture Hours			48

Signature of Teacher:

Dated: 15-08-2023.

Remarks by DMRC: **APPROVED**

Signature of Chairman:

Dated: 20-10-2023