

Lesson plan for 3rd semester civil engineering

2022-23

Name of teaching faculty:

Discipline/Deptt: Civil Engineering

Semester: 3rd

Subject (Practical): CIVIL ENGINEERING LABORATORY-1

No. of periods per week: 6

Total Periods: 90

Week	Periods	Unit/Chapter	Topics to be covered
1 st	3	1	Determination of Young's Modulus of steel in a tensile testing machine.
	3	1	Determination of Young's Modulus of steel in a tensile testing machine.
2 nd	3	2.1	Determination of fineness of Cement by sieving.
	3	2.2	Determination of normal Consistency, initial and final setting time of Cement
3 rd	3	2.2	Determination of normal Consistency, initial and final setting time of Cement
	3	2.3	Determination of soundness of Cement by Le-Chatelier apparatus.
4 th	3	2.4	Determination of Compressive Strength of cement.
	3	2.5	Determination of Compressive Strength of Burnt clay, Fly Ash Bricks and Blocks.
5 th	3	2.6	Grading of Fine & Coarse aggregate by sieving for concrete.
	3	2.7	Determination of Specific Gravity and Bulking of sand.
6 th	3	2.8	Determination of Specific Gravity and Bulk density of coarse aggregate.
	3	2.8	Determination of Specific Gravity and Bulk density of coarse aggregate.
7 th	3	2.9	Grading of Road Aggregates.
	3	2.10	Determination of Flakiness, Elongation of Road aggregates.
8 th	3	2.11	Determination of Crushing Value Test of aggregates.
	3	2.11	Determination of Crushing Value Test of aggregates.
9 th	3	2.12	Los-Angeles Abrasion Test of aggregate.
	3	2.13	Impact test of aggregate.
10 th	3	2.14	Determination of soundness test of road aggregates.
	3	2.14	Determination of soundness test of road aggregates.
11 th	3	3.1	Determination of Compressive Strength of concrete cubes.
	3	3.1	Determination of Compressive Strength of concrete cubes.
12 th	3	3.2	Determination of Workability of concrete by: a) Slump Cone method,

	3	3.2	Determination of Workability of concrete by: a) Slump Cone method,
13 th	3	3.2	Determination of Workability of concrete b) Compaction Factor method
	3	3.2	Determination of Workability of concrete b) Compaction Factor method
14 th	3	3.3	Non Destructive tests on Concrete: a) Demonstration on Rebound hammer
	3	3.3	Non Destructive tests on Concrete: a) Demonstration on Rebound hammer
15 th	3	3.3	Non Destructive tests on Concrete b) Ultrasonic Pulse Velocity measuring Instrument.
	3	3.3	Non Destructive tests on Concrete b) Ultrasonic Pulse Velocity measuring Instrument.

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 16/9/2022
 Lect. (Civil)