

LESSON PLAN FOR CIVIL ENGINEERING LAB- II (PR.1)

Discipline: Civil Engineering	Semester:5th	Name of the Teaching Faculty: SUBRAT KUMAR PANIGRAHI
Subject: CIVIL ENGINEERING LAB- II	Numbers of Classes per Week:6	Semester from date: 01.07.2024 to date:08.11.2024 No. of weeks: 19 Session: 2024-25
week	Class day	Theory
1st		1.0 TESTS ON SOIL :
	1st	1.1 Determination of Specific gravity of Soil by Pycnometer /Density bottle.
	2nd	1.2 Determination of Field Density of Soil by Core Cutter Method.
2nd	1st	1.3 Determination of Particle Size gradation of sand/Gravel by sieve analysis.
	2nd	1.4 Wet mechanical analysis using pipette method for clay and silt.
3rd	1st	1.5 (a)Determination of Liquid Limit by soil by Casagrande's apparatus.
	2nd	(b)Determination of Plastic limit of soil.
4th	1st	1.6 Determination of Shrinkage limit of soil.
	2nd	1.7 Determination of MDD & OMC of soil by using modified Proctor Test.
5th	1st	1.8 Determination of CBR value using Laboratory CBR Testing device.
	2nd	1.8 Determination of CBR value using Laboratory CBR Testing device.
6th	1st	1.9 Determination of c and ϕ of soil by triaxial testing device.
	2nd	1.9 Determination of c and ϕ of soil by triaxial testing device.
7th	1st	1.10 Determination of coefficient of permeability of soil by constant head method.
	2nd	1.10 Determination of coefficient of permeability of soil by constant head method.
8th	1st	2.1 Verification of Bernoulli's Theorem
	2nd	2.1 Verification of Bernoulli's Theorem
9th	1st	2.3 Determination of coefficient of Discharge of a rectangular notch fitted in open Channel.
	2nd	2.3 Determination of coefficient of Discharge of a rectangular notch fitted in open Channel.
10th	1st	2.3 Determination of coefficient of Discharge of a Venturimeter, Orificemeter fitted in a pipe
	2nd	2.3 Determination of coefficient of Discharge of a Venturimeter, Orificemeter fitted in a pipe
	1st	2.4 Determination of head Loss due to friction and coefficient of friction for flow through pipe.
	2nd	2.4 Determination of head Loss due to friction and coefficient of friction for flow through pipe.

12th	1 st	3.1 Penetration Test of Bitumen.
	2nd	3.2 Ductility Test of Bitumen.
13th	1 st	3.3 Viscosity Test of Bitumen.
	2nd	3.4 Bitumen content by centrifuge extractor.
14th	1 st	4.1 Determination of Turbidity of water Sample using Turbidimeter/Nephelometer/Jackson's Candle Turbidimeter.
	2nd	4.1 Determination of Turbidity of water Sample using Turbidimeter/Nephelometer/Jackson's Candle Turbidimeter.
15th	1 st	4.2 Determination of pH of Water sample using (a) pH – meter (b) colour Comparator.
	2nd	4.2 Determination of pH of Water sample using (a) pH – meter (b) colour Comparator.
16th	1 st	4.3 Determination of Chloride content of a Water sample using method of titration.
	2nd	4.3 Determination of Chloride content of a Water sample using method of titration.
17th	1 st	4.4 Determination of Coagulant (Alum) dose requirement for a turbid water sample by Jar Test.
	2nd	4.4 Determination of Coagulant (Alum) dose requirement for a turbid water sample by Jar Test.
18th	1 st	4.5 Determination of dissolved oxygen in a water sample.
	2nd	4.5 Determination of dissolved oxygen in a water sample.
19th	1st	4.6 Determination of bacteriological quality of water sample by Coliform test.
	2nd	4.6 Determination of bacteriological quality of water sample by Coliform test.

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28/06/24

Lecturer

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Academic Co-ordinator

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Principal

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