PROGRAMME : CIVIL ENGINEERING **COURSE NAME : CIVIL ENGINEERING LAB 2** **COURSE CODE : Pr 1** **SEMESTER : 5TH** **PERIODS/WEEK: 6** **TOTAL PERIODS: 90**	**NAME OF THE FACULTY: PRIYAJIT BEHERA**

WEEK	CLASS	TOPICS
1	1	Determination of Specific gravity of Soil by Pycnometer /Density bottle.
	2	Determination of Field Density of Soil by Core Cutter Method.
2	1	Determination of Particle Size gradation of sand/Gravel by sieve analysis.
	2	Wet mechanical analysis using pipette method for clay and silt.
3	1	(a)Determination of Liquid Limit by soil by Casagrande"s apparatus.
	2	(b)Determination of Plastic limit of soil.
4	1	Determination of Shrinkage limit of soil
	2	Determination of Shrinkage limit of soil
5	1	Determination of MDD & OMC of soil by using modified Proctor Test.
	2	Determination of MDD & OMC of soil by using modified Proctor Test.
6	1	Determination of CBR value using Laboratory CBR Testing device
	2	Determination of c and ϕ of soil by triaxial testing device
7	1	Determination of coefficient of permeability of soil by constant head method
	2	Verification of Bernoulli's Theorem
8	1	Determination of coefficient of Discharge of a rectangular notch fitted in open Channel.
	2	Determination of coefficient of Discharge of a Venturimeter, Orificemeter fitted in a pipe 2.4 Determination of head Loss due to friction and coefficient of friction for flow through pipe.
9	1	Penetration Test of Bitumen.
	2	Ductility Test of Bitumen
10	1	Viscosity Test of Bitumen
	2	Bitumen content by centrifuge extractor.
11	1	Determination of Turbidity of water Sample using Turbidimeter/Nephlometer/Jackson's Candle Turbidimete
	2	Determination of Turbidity of water Sample using Turbidimeter/Nephlometer/Jackson's Candle Turbidimete
12	1	Determination of pH of Water sample using (a) pH – meter (b) colour Comparator.
	2	Determination of pH of Water sample using (a) pH – meter (b) colour Comparator.

13	1	Determination of Chloride content of a Water sample using method of titration.
	2	Determination of Chloride content of a Water sample using method of titration.
14	1	Determination of Coagulant (Alum) dose requirement for a turbid water sample by Jar Test.
	2	Determination of Coagulant (Alum) dose requirement for a turbid water sample by Jar Test.
15	1	Determination of dissolved oxygen in a water sampl
	2	Determination of bacteriological quality of water sample by Coliform test.