Govt. Polytechnic Dept. of Civil Kandhamal

Batch - 2022-25

Session - 2023-24 (Winter-2023)

LESSON PLAN FOR PR-I - (CIVIL ENGINEERING LABORATORY -I)

Discipline: Civil Engineering	Semester: 3rd	Name of the Teaching Faculty : Ashish Nayak, Lecturer in Civil Engineering
Subject: CIVIL ENGINEERING LABORATORY-I (Pr-1)	No. of Days/per week class allotted:	Semester From Date: 01/08/2023 To Date: 30/11/2023 No. of Weeks-15
Week	**Class Day**	**Practical Topics**
		I. Material Testing Laboratory: **1. Test on Steel**
1st	1st/2nd	Determination of Young's Modulus of steel in a tensile testing machine.
		2. Tests on Cement, Sands, Bricks, Blocks & Aggregates
2nd	1st	2.1 Determination of fineness of Cement by sieving.
	2nd	2.2 Determination of normal Consistency, initial and final setting time of Cement
3rd	1st	2.3 Determination of soundness of Cement by Le-Chatelier apparatus.
	2nd	2.4 Determination of Compressive Strength of cement.
4th	1st	2.5 Determination of Compressive Strength of Burnt clay, Fly Ash Bricks and Blocks
	2nd	2.6 Grading of Fine & Coarse aggregate by sieving for concrete .
5th	1st	2.7 Determination of Specific Gravity and Bulking of sand
	2nd	2.8 Determination of Specific Gravity and Bulk density of coarse aggregate
6th	1st	2.9 Grading of Road Aggregates
	2nd	2.10 Determination of Flakiness, Elongation of Road aggregates.
7th	1st/2nd	2.11 Determination of Crushing Value Test of aggregates.
8th	1st/2nd	2.12 Los-Angeles Abrasion Test of aggregate
9th	1st/2nd	2.13 Impact test of aggregate.
10th	1st/2nd	2.14 Determination of soundness test of road aggregates
		II. Concrete Laboratory

11th	1st/2nd	3.1 Determination of Compressive Strength of concrete cubes
12th	1st/2nd	3.2 Determination of Workability of concrete by: a) Slump Cone method,
13th	1st/2nd	b) Compaction Factor method.
14th	1st/2nd	3.3 Non Destructive tests on Concrete: a) Demonstration on Rebound hammer
15th	1st/2nd	b) Ultrasonic Pulse Velocity measuring Instrument

Discipline: Civil Engg. | Semester: 3rd
Subject: Civil Engg. | No. of Days
Week | Class
1st

Dept.of Civil
Kandhamal

Ashish Nayak
31/07/2023

01/08/2023

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