KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN

Session (2022 -2023)

Discipline: Civil Engineering	**Semester:** 3rd, W/22	**Name of the faculty:** Abhijeet Prasad Dash, Lecturer **Email ID**: abhijeetfce@kp.kiit.ac.in
Subject: Civil Engineering laboratory-1 (Pr.1)	**No. of Days/week: 02** (3 periods / Day) Experiments will be performed in small groups of 5 to 6 students	**Start Date:** 14/09/2022 **End Date:** 21/01/2023

S.N.	Course Content	Mode of Delivery
1	Determination of fineness of Cement by sieving.	Explanation
2	Determination of fineness of Cement by sieving.	Video content
3	Determination of fineness of Cement by sieving.	Student presentation
4	Determination of initial and final setting time of Cement	Explanation
5	Determination of initial and final setting time of Cement	Video content
6	Determination of initial and final setting time of Cement	Student presentation
7	Determination of soundness of Cement by Le-Chatelier apparatus.	Demonstration
8	Determination of soundness of Cement by Le-Chatelier apparatus.	Video content
9	Determination of soundness of Cement by Le-Chatelier apparatus.	Student presentation
10	Determination of Compressive Strength of cement.	Video content
11	Determination of Compressive Strength of cement.	Demonstration
12	Determination of Compressive Strength of cement.	Student presentation
13	Determination of Compressive Strength of Burnt clay.	Demonstration
14	Determination of Compressive Strength of Fly Ash Bricks	Demonstration
15	Determination of Compressive Strength of Blocks.	Demonstration

16	Determination of Compressive Strength of Fly Ash Bricks, Blocks	Student presentation
17	Grading of Fine & Coarse aggregate by sieving for concrete.	Video content
18	Grading of Fine & Coarse aggregate by sieving for concrete.	Demonstration
19	Grading of Fine & Coarse aggregate by sieving for concrete.	Student presentation
20	Determination of Specific Gravity and Bulking of sand.	Demonstration
21	Determination of Specific Gravity and Bulking of sand.	Student presentation
22	Determination of Specific Gravity and Bulk density of coarse aggregate.	Demonstration
23	Determination of Specific Gravity and Bulk density of coarse aggregate.	Student presentation
24	Grading of Road Aggregates.	Demonstration
25	Grading of Road Aggregates.	Student presentation
26	Grading of Road Aggregates.	Student presentation
27	Determination of Flakiness.	Video content
28	Determination of Flakiness.	Demonstration
29	Determination of Flakiness.	Student presentation
30	Determination of Elongation of Road aggregates.	Video content
31	Determination of Elongation of Road aggregates.	Demonstration
32	Determination of Elongation of Road aggregates.	Student presentation
33	Determination of Crushing Value Test of aggregates.	Video content
34	Determination of Crushing Value Test of aggregates.	Student presentation
35	Determination of Crushing Value Test of aggregates.	Demonstration
36	Determination of Crushing Value Test of aggregates.	Student presentation
37	Los-Angeles Abrasion Test of aggregate.	Video content
38	Los-Angeles Abrasion Test of aggregate.	Student presentation
39	Los-Angeles Abrasion Test of aggregate.	Student presentation
40	Los-Angeles Abrasion Test of aggregate.	Demonstration
41	Los-Angeles Abrasion Test of aggregate.	Student presentation
42	Impact test of aggregate.	Video content
43	Impact test of aggregate.	Demonstration
44	Impact test of aggregate.	Demonstration
45	Impact test of aggregate.	Student presentation
46	Determination of soundness test of road aggregates.	Video content
47	Determination of soundness test of road aggregates.	Demonstration

48	Determination of soundness test of road aggregates.	Student presentation
49	Determination of Compressive Strength of concrete cubes.	Video content
50	Determination of Compressive Strength of concrete cubes.	Student presentation
51	Determination of Compressive Strength of concrete cubes.	Student presentation
52	Determination of Workability of concrete by: a) Slump Cone method	Video content
53	Determination of Workability of concrete by: a) Slump Cone method	Demonstration
54	Determination of Workability of concrete by: a) Slump Cone method	Student presentation
55	Determination of Workability of concrete by: b) Compaction Factor method.	Video content
56	Determination of Workability of concrete by: b) Compaction Factor method.	Demonstration
57	Non Destructive tests on Concrete:	Video content
58	Demonstration on Rebound hammer	Video content
59	Ultrasonic Pulse Velocity Measuring Instrument.	Video content
60	Ultrasonic Pulse Velocity Measuring Instrument.	Explanation