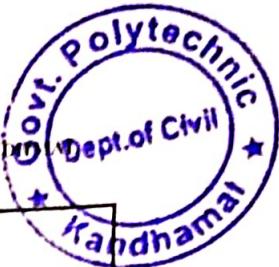


LESSON PLAN OF CIVIL ENGG. LAB-1 FOR THE SESSION 2022-23(WINTER-2022) GOVT. POLYTECHNIC, KAN

BATCH- 2021-24.



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|--|---|--|
| Discipline: Civil Engineering                  | Semester: 3rd                           | Name of the Teaching Faculty: Bachha Siba Kumar Dora                               |
| Subject: CIVIL ENGINEERING LABORATORY-I (Pr-1) | No. of Days/ per week class allotted: 6 | Semester From Date: 15/09/2022 To Date: 22/12/2022 , 21/01/2023<br>No of Weeks: 15 |
| Week   | Class Day                               | Practical Topics   |
|  |   | I. Material Testing Laboratory:<br>I. 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:<br>a) Slump Cone method,          |
| 13th   | 1st/2nd                                 | b) Compaction Factor method.   |
| 14th   | 1st/2nd                                 | 3.3 Non Destructive tests on Concrete:<br>a) Demonstration on Rebound hammer       |
| 15th   | 1st/2nd                                 | b) Ultrasonic Pulse Velocity measuring Instrument                                  |

*B. Siba Kumar Dora*

Signature of Lecturer

*15/09/22*

Signature of D.T.O.  
H. O. D.  
Dept. of Civil Engg.  
Govt. Polytechnic  
Kandhamal

Signature of Principal