

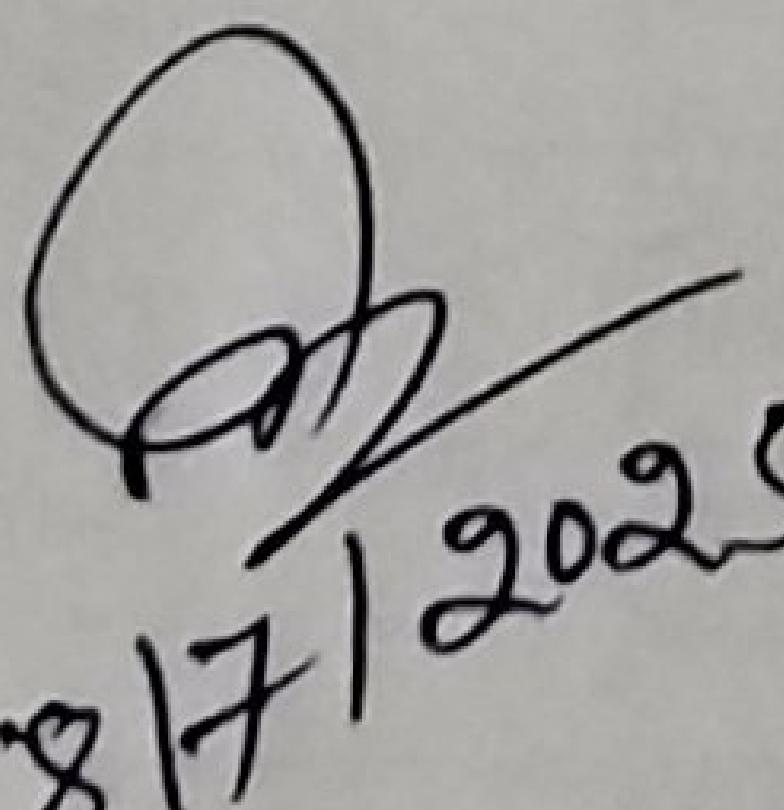


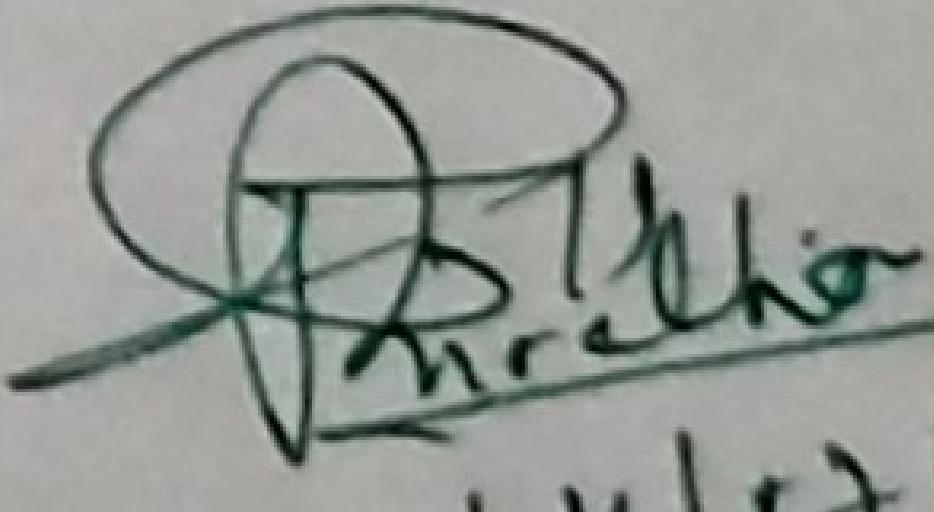
LESSON PLAN OF CEPC215 PR:3 Geotechnical Engineering Lab.
FOR THE SESSION 2025-26(WINTER-2025) BATCH-2024-27, GOVT.
POLYTECHNIC, KANDHAMAL

Discipline: civil engineering	Semester: 3rd	Name of the Teaching Faculty: Ashish Nayak, Lect. in Civil Engg.
Subject: CEPC215 PR:3 Geotechnical Engineering Lab..	No. of days/ per week class allotted: 4	Semester From Date : 14/07/2025 to Date: 15/11/2025 No. of Weeks: 15
Week	Class Day	Theory/ Practical Topics (as per Blooms Taxonomy)
1st	1st	Determine water content of given soil sample by oven drying method as per IS: 2720 (Part-II).
	2nd	Determine water content of given soil sample by oven drying method as per IS: 2720 (Part-II).
	3rd	Determine water content of given soil sample by oven drying method as per IS: 2720 (Part-II).
	4th	Determine water content of given soil sample by oven drying method as per IS: 2720 (Part-II).
2nd	1st	Determine specific gravity of soil by pycnometer method as per IS 2720 (Part-III).
	2nd	Determine specific gravity of soil by pycnometer method as per IS 2720 (Part-III).
	3rd	Determine specific gravity of soil by pycnometer method as per IS 2720 (Part-III).
	4th	Determine specific gravity of soil by pycnometer method as per IS 2720 (Part-III).
3rd	1st	Determine dry unit weight of soil in field by core cutter method as per IS 2720 (Part- XXIX).
	2nd	Determine dry unit weight of soil in field by core cutter method as per IS 2720 (Part- XXIX).
	3rd	Determine dry unit weight of soil in field by core cutter method as per IS 2720 (Part- XXIX).
	4th	Determine dry unit weight of soil in field by core cutter method as per IS 2720 (Part- XXIX).
4th	1st	Determine dry unit weight of soil in field by sand replacement method as per IS 2720 (Part-XXVIII).
	2nd	Determine dry unit weight of soil in field by sand replacement method as per IS 2720 (Part-XXVIII).
	3rd	Determine dry unit weight of soil in field by sand replacement method as per IS 2720 (Part-XXVIII).
	4th	Determine dry unit weight of soil in field by sand replacement method as per IS 2720 (Part-XXVIII).
5th	1st	Determine Plastic and Liquid Limit along with Plasticity Index of given soil sample as per IS 2720 (Part- V).

	2nd	Determine Plastic and Liquid Limit along with Plasticity Index of given soil sample as per IS 2720 (Part- V).
	3rd	Determine Plastic and Liquid Limit along with Plasticity Index of given soil sample as per IS 2720 (Part- V).
	4th	Determine Plastic and Liquid Limit along with Plasticity Index of given soil sample as per IS 2720 (Part- V).
6th	1st	Determine Shrinkage limit of given soil sample as per IS 2720 (Part- V).
	2nd	Determine Shrinkage limit of given soil sample as per IS 2720 (Part- V).
	3rd	Determine Shrinkage limit of given soil sample as per IS 2720 (Part- V).
	4th	Determine Shrinkage limit of given soil sample as per IS 2720 (Part- V).
7th	1st	Determine grain size distribution of given soil sample by mechanical sieve analysis as per IS2720 (Part- IV).
	2nd	Determine grain size distribution of given soil sample by mechanical sieve analysis as per IS2720 (Part- IV).
	3rd	Determine grain size distribution of given soil sample by mechanical sieve analysis as per IS2720 (Part- IV).
	4th	Determine grain size distribution of given soil sample by mechanical sieve analysis as per IS2720 (Part- IV).
8th	1st	Use different types of soil to identify and classify soil by conducting field tests- through Visual inspection, Dry strength test, Dilatancy test and Toughness test.
	2nd	Use different types of soil to identify and classify soil by conducting field tests- through Visual inspection, Dry strength test, Dilatancy test and Toughness test.
	3rd	Use different types of soil to identify and classify soil by conducting field tests- through Visual inspection, Dry strength test, Dilatancy test and Toughness test.
	4th	Use different types of soil to identify and classify soil by conducting field tests- through Visual inspection, Dry strength test, Dilatancy test and Toughness test.
9th	1st	Determine coefficient of permeability by constant head test as per IS 2720 (Part-XVII).
	2nd	Determine coefficient of permeability by constant head test as per IS 2720 (Part- XVII).
	3rd	Determine coefficient of permeability by constant head test as per IS 2720 (Part- XVII).
	4th	Determine coefficient of permeability by constant head test as per IS 2720 (Part- XVII).
10th	1st	Determine coefficient of permeability by falling head test as per IS 2720 (Part- XVII).
	2nd	Determine shear strength of soil by direct shear test as per IS 2720 (Part- XIII).
	3rd	Determine shear strength of soil by direct shear test as per IS 2720 (Part-XIII).

	4th	Determine shear strength of soil by direct shear test as per IS 2720 (Part-XIII).
11th	1st	Determine shear strength of soil by vane shear (Part-XXX).
	2nd	Determine shear strength of soil by vane shear (Part-XXX).
	3rd	Determine shear strength of soil by vane shear (Part-XXX).
	4th	Determine shear strength of soil by vane shear (Part-XXX).
12th	1st	triaxial shear test as per IS 2720 (Part-XXX).
	2nd	triaxial shear test as per IS 2720 (Part-XXX).
	3rd	triaxial shear test as per IS 2720 (Part-XXX).
	4th	triaxial shear test as per IS 2720 (Part-XXX).
13th	1st	Determine MDD and OMC by standard proctor test and modified proctor test of given soil sample as per IS 2720 (Part-VII).
	2nd	Determine MDD and OMC by standard proctor test and modified proctor test of given soil sample as per IS 2720 (Part-VII).
	3rd	Determine MDD and OMC by standard proctor test and modified proctor test of given soil sample as per IS 2720 (Part-VII).
	4th	Determine MDD and OMC by standard proctor test and modified proctor test of given soil sample as per IS 2720 (Part-VII).
14th	1st	Determination of CBR value on the field as per IS2720 (Part - XVI).
	2nd	Determination of CBR value on the field as per IS2720 (Part - XVI).
	3rd	Determination of CBR value on the field as per IS2720 (Part - XVI).
	4th	Determination of CBR value on the field as per IS2720 (Part - XVI).
15th	1st	Record Submition
	2nd	Record Submition
	3rd	Record Submition
	4th	Record Submition


 8/7/2025.
 Lect in Civil


 14/8/2025

H.O.D
 Dept. of Civil Engg.
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 Kandhamal