

<u>Lesson Plan</u>			
Name of the Faculty :	Deepak Kumar Panwar	Discipline :	Civil Engineering
Subject	SMFE PRACTICAL	Semester :	4TH
Lesson Plan Duration :	January 2026-May 2026(15 Weeks)		
			L T P - - 2
Week	Topic	Delivery Date of Lecture	Whether the Lesson Plan Followed? Yes/ No
	(Including Assignments / Seminar / Group Discussion / Sessional Tests)		
1st	1. To determine the moisture content of a given sample of soil		
2nd	2. Auger Boring and Standard Penetration Test a) Identifying the equipment and accessories b) Conducting boring and SPT at a given location c) Collecting soil samples and their identification d) Preparation of boring log and SPT graphs e) Interpretation of test results		
3rd	3. Extraction of Disturbed and Undisturbed Samples a) Extracting a block sample b) Extracting a tube sample c) Extracting a disturbed samples for mechanical analysis. d) Field identification of samples		
4th	4. Field Density Measurement (Sand Replacement and Core Cutter Method) a) Calibration of sand b) Conducting field density test at a given location c) Determination of water content d) Computation and interpretation of results		
5th	5. Liquid Limit and Plastic Limit Determination: a) Identifying various grooving tools b) Preparation of sample c) Conducting the test d) Observing soil behaviour during tests Computation, plotting and interpretation of results		
6th	Sessional Test -1		
7th	6. Mechanical Analysis a) Preparation of sample b) Conducting sieve analysis c) Computation of results d) Plotting the grain size distribution curve e) Interpretation of the curve		
8th	7. Laboratory Compaction Tests (Standard Proctor test) a) Preparation of sample b) Conducting the test c) Observing soil behaviour during test d) Computation of results and plotting e) Determination of optimum moisture and maximum dry density		

9 th	8.Direct Shear Test		
10 th	9. Permeability Test		
11 th	Sessional Test -2		
12 th	10.Demonstration of Unconfined Compression Test a)Specimen preparation b)Conducting the test c)Plotting the graph d)Interpretation of results and finding/bearing capacity		
13 th	11.Demonstration of Vane shear Test		
14 th	Sessional Test -3		
15 th	Revision of syllabus, display/Intimation of 3 rd Sessional marks, Academic evaluation-analysis of Sessionals.		