

Name of the laboratory: Geotechnical engineering lab

Objectives of the lab: Soil Testing is an integral part of soil mechanics and foundation engineering. A proper evaluation of soil samples and analysis of test results are essential of students and practicing civil Engineers. Tri-axial Testing machine, Direct Shear testing machine, Unconfined compression testing machine , consistency limit testing machines available in the laboratory.

List of the equipment:

1. Tri-axial Testing machine
2. Direct Shear testing machine
3. Unconfined compression testing machine
4. Consistency limit testing machines
5. Standard Proctor
6. Sieve as per IS standers

List of the experiments:

1. Atterberg Limits (Liquid Limit, Plastic Limit, and shrinkage limit)
2. a) Field density by core cutter method and b) Field density by sand replacement method
3. Determination of Specific gravity of soil Grain size distribution by sieve analysis
4. Permeability of soil by constant and variable head test methods
5. Standard Proctor's Compaction Test
6. Determination of Coefficient of consolidation (square root time fitting method)
7. Unconfined compression test 8. Direct shear test
9. Vane shear test
10. Differential free swell index (DFSI) test

