

School of Civil Engineering

Tentative Testing Capacity of the School Laboratories

Transportation Engineering Lab

S.No.	Type of Test	Equipment	Available	Will be Available
1	California Bearing Ratio Test	CBR Test Apparatus	Yes	
2	Soil In-situ Density Test	Sand Boring Cylinder & Tray	Yes	
3	Grading Analysis of Aggregates	Sieves	Yes	
4	Water Absorption of aggregates & sand	Water Absorption Testing Apparatus	Yes	
5	Aggregate Crushing Value Test	Measuring Cylinder	Yes	
6	Aggregate Shape (Flakiness and Elongation Indices)	Flakiness and Elongation Apparatus	Yes	
7	Aggregate Specific Gravity Test	Specific Gravity Jar Apparatus	Yes	
8	Los Angeles Abrasion Value Test	Los Angeles Abrasion Test Apparatus	Yes	
9	Bitumen Extraction Test for Surface Course (Bitumen Content and Sieve Analysis)	Bitumen Extraction Test Apparatus	Yes	
10	Bitumen Penetration Testing	Bitumen Penetration Apparatus	Yes	
11	Bitumen Specific Gravity Test	Specific Gravity Jar Apparatus	Yes	
12	Thin Film Test of Bitumen	Thin Film Apparatus	Yes	

Concrete Technology Lab				
S.No.	Type of Test	Equipment	Available	Will be Available
1	Cement Testing Complete (Fineness Modulus Test, Soundness Test, Consistency Test, Setting Time Test)	IS Sieves, Le-Chatelier Apparatus, Vicat Apparatus	Yes	
2	Specific Gravity of Cement	Specific Gravity Jar Apparatus	Yes	
3	Compression Testing of Concrete Cubes	Compression Testing Machine (CTM)	No	Till March
4	Compression Testing of Cement Mortar Cubes	Compression Testing Machine (CTM)	No	Till March
5	Concrete Mix Design	Compression Testing Machine (CTM)	No	Till March
6	Slump Value Test of Concrete	Slump Cone Test Apparatus	Yes	
7	Vee-Bee Consistometer Test	Vee-Bee Consistometer	Yes	
8	Non-Destructive Testing of Concrete (NDT)	Rebound Hammer Apparatus (Digital)	Yes	
9	Brick Testing	-----	Yes	
Soil Mechanics Lab				
S.No.	Type of Test	Equipment	Available	Will be Available
1	Natural Moisture Content of the Soil	Hot Air Oven and Weighing Machine	Yes	
2	Specific Gravity of Soil	Sp. Gravity Jar Apparatus	Yes	
3	Liquid Limit & Plastic Limit	Liquid limit test apparatus	Yes	
4	Shrinkage Limit Test	Shrinkage Limit Apparatus	Yes	
5	Sieve Analysis of Soil	IS Sieves	Yes	
6	Compaction Test	Mould and hammer	Yes	
7	Shear Strength of Soil Testing	Direct Shear Test Apparatus	Yes	
8	Unconfined Compressive Strength of Soil Test	Unconfined Compressive Strength Test Apparatus	Yes	

Environmental Engg Lab				
S.No.	Water test	Equipment	Available	Will be Available
1	pH value & Temperature of water	pH Meter	Yes	
2	Conductivity of water	Conductivity Meter	Yes	
3	Turbidity of water	Turbidity Meter	Yes	
5	Alkalinity of water	pH Meter	Yes	
7	Chloride content of water	----	Yes	
8	Dissolved Oxygen of water	Dissolved Oxygen Meter	Yes	
9	Coagulation Dose of Water	Jar test apparatus	Yes	
10	TS, TDS and TSS in water	Oven and TDS Meter	Yes	
11	Total Iron content in water	Oven	Yes	
12	Biological Oxygen Demand	Incubator and DO Meter	Yes	
13	Chemical Oxygen Demand	Digester	Yes	
14	MPN Test	Autoclave Apparatus	Yes	