

Transportation Engineering Lab

Objective: Conduct all standardized tests to assess quality of highway materials and pavements. Like, Aggregate impact test, Attrition test, Penetration test for bitumen and other tests



Sections Handled:

IInd Years

Major Equipment Details:

Sl.No	Equipment Name	Qty
1	Apparatus for Aggregate Crushing Test	1
2	Pycnometer	1
3	Deval 's Attrition Testing Machine	1
4	Length & Elongation Gauges	1
5	Bitumen Ductility Test setup	1
6	Viscometer	1
7	Aggregate Impact testing machine	1
8	Los Angeles Abrasion Testing Machine	1
9	Mechanical Sieve Shaker	1
10	Bitumen Penetration Test Setup	1
11	Ring & ball Apparatus	1
12	Marshall Mix Design Apparatus	1
13	Benkelman's Beam Apparatus	1
14	Radar Gun -Spot speed Studies	1

Faculty In charge with qualification: Raju Gogam - M.Tech

Technician name with qualification: K.Vinay Kumar - B.Tech

Experiment list as per curriculum:

I. ROAD AGGREGATES:

1. Aggregate Crushing value test
2. Aggregate impact test
3. Specific gravity and water absorption test
4. Attrition test
5. Abrasion test
6. Shape test

II. BITUMINOUS MATERIALS:

1. Penetration test
2. Ductility test
3. Softening test
4. Flash and fire point test
5. Stripping test
6. Viscosity test

III. BITUMINOUS MIX:

1. Marshall stability test

IV: TRAFFIC SURVEYS:

1. Traffic volume study at mid blocks
2. Traffic volume study at intersections
3. Spot speed studies
4. Parking studies

V: DESIGN & DRAWING:

1. Earth work calculations for road work

2. Drawing of road cross sections
3. Rotary Intersection design