

Course Objective:

To have knowledge on various highway materials like aggregate, bitumen, mechanical properties of the materials and their usage in the field.

Note: Minimum of eight experiments is to be executed

I. Tests on Aggregates

1. Aggregate Crushing Value Test
2. Los Angeles Abrasion Test
3. Aggregate Impact Value Test
4. Aggregate shape Test (Flakiness & Elongation)
5. Specific Gravity of Aggregate Test
6. Water Absorption of Aggregate Test
7. Soundness Test

II. Tests on Bitumen

1. Penetration Test
2. Ductility Test
3. Softening Point Test
4. Specific Gravity Test
5. Viscosity Test
6. Flash and Fire Point Test

III. Demo on Bituminous Mixes

1. Marshall Stability Test

Course Outcomes:

- Be able to analyze various properties for Aggregates and Bitumen.
- Aggregate properties like Crushing, Impact, Soundness etc., will be known
- Bitumen properties like Ductility, Penetration, Softening point, flash and fire etc will be known

