

KCE751- Concrete Lab

S.No.	Name of major equipment/setup
1	Los Angeles Abrasion Testing Machine
2	Cylindrical Measures
3	Penetrometer
4	Ring and ball point apparatus
5	Density Basket
6	Ductility Mould
7	Ductility testing machine
8	Flakiness index
9	Flash and fire point apparatus
10	Tamping Rod
11	Elongation index
12	Impact testing machine
13	Viscometer
14	Sieve set
15	Thermometer
16	Water bath

LIST OF EXPERIMENTS
KCE-751 CONCRETE LAB

1. Study of IS codes for (i) Aggregates (ii) Cements (iii) Admixtures (iv) Fly ash
2. Concrete Mix design computation by ACI 211.1-91 method, IS code method as per 10262-2007 & 456-2000, DOE method for a given sample.
3. Preparation and testing of samples as per any one of the above-mentioned computations (Minimum grade of concrete is M30)
4. Tests on Concrete- (a) Workability tests - Slump cone test, compaction factor test, Vee-bee densitometer test, flow table test. (b) Strength tests- compressive strength, flexural strength, split tensile strength.
5. Effects of Admixture - Accelerator, Retarder, Super Plasticizer.
6. Non-destructive Testing - Rebound Hammer test, Ultrasonic Pulse Velocity test.