

KCE-451 Material Testing Lab

S.No.	Name of major equipment/setup
1	Vicat apparatus
2	Air permeability apparatus
3	Bulk density apparatus
4	Cement tensile testing machine
5	Aggregate crushing value
6	Lechatlier's mould
7	Lechatlier flask
8	Sieve shaker
9	Hos Balance
10	Pan balance
11	Scoop
12	Steel pan
13	Plastic bucket
14	Concrete Mixer
15	Compaction Factor test
16	Flow Table
17	Cube mould
18	Steel tray
19	Vibrating table
20	Slump apparatus
21	Oven

LIST OF EXPERIMENTS

KCE-451 MATERIAL TESTING LAB

Testing of various properties of the following materials as per BIS specifications

I. Cement

1. Normal Consistency of cement.
2. Initial & final setting time of cement
3. Compressive strength of cement
4. Fineness of cement by air permeability and Le-chatalier's apparatus.
5. Soundness of cement.
6. Tensile strength

II. Coarse Aggregate

1. Water absorption of aggregate
2. Sieve Analysis of Aggregate
3. Specific gravity & bulk density
4. Grading of aggregates.

III Fine Aggregate:

1. Sieve analysis of sand
2. Silt content of sand
3. Bulking of sand

IV Bricks:

1. Water absorption.
2. Dimension Tolerances
3. Compressive strength
4. Efflorescence