

31045- MATERIAL TESTING LAB II

DETAILED SYLLABUS

OBJECTIVES

On completion of the course, the student will be familiar with

- Test on properties of fine aggregate and coarse aggregate.
- Test on properties of soil.
- Analysis the properties of water/waste water

LIST OF EXPERIMENTS

PART A

1. Determination of Voids ratio and porosity of sand.
2. Determination of liquid limit and plastic limit of the given soil.
3. Determination of bulk density and specific gravity of Fine aggregates.
4. Determination of bulk density and specific gravity of Coarse aggregates.
5. Proctor's compaction test on clay.
6. Direct shear test on sand.
7. Field Density of Soil by core cutter method / sand replacement method.

PART B

1. Attrition test on Aggregate.
2. Abrasion test on Aggregate.
3. Aggregate crushing value test.
4. Aggregate impact value test.

PART C

1. Determination of Total solids present in the given sample of water.
2. Determination of Turbidity of water by "Jackson candle turbidity meter."
3. Determination of settleable solids present in the given sample of water/ waste water by "Imhoff cone."
4. Determination of Water absorption of coarse aggregate.