

TRANSPORTATION ENGINEERING LAB

Course Code: 13CE1125

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Course Educational Objectives: :

To introduce

- ❖ Bitumen and & its engineering behavior.
- ❖ Aggregate & its engineering behavior.
- ❖ Concept of traffic behavior.

Course Outcomes:

The student will be able to

- ❖ Identify engineering properties of aggregate.
- ❖ Identify the grade & properties of bitumen.
- ❖ Find out peak hour traffic & peak time for a given location on the road.
- ❖ Calculate design speed, maximum speed & minimum speed limits of a location through spot speed.
- ❖ Draw parking accumulation curve and find out parking duration & turnover of parking lot/stretch.

LIST OF EXPERIMENTS:

ROAD AGGREGATES:

1. Aggregate Crushing value
2. Aggregate Impact Test.
3. Specific Gravity and Water Absorption.
4. Attrition Test
5. Abrasion Test.
6. Shape tests

BITUMINOUS MATERIALS:

7. Viscosity Test.
8. Ductility Test.
9. Softening Point Test.
10. Flash and fire point tests.
11. Marshall mix design
12. Benkelman beam (Optional)

TRAFFIC ENGINEERING

13. Traffic volume studies
14. Spot speed studies
15. Parking study

