

## **MATERIAL TESTING LAB**

The Material Testing Lab is designed to provide students with practical knowledge of the properties and behavior of construction materials under various conditions. It is well-equipped with key instruments such as the Compression Testing Machine, Flexure Testing Machine, and Flexure Strength Testing Machine to determine the strength characteristics of concrete and other materials. This laboratory serves as a crucial learning environment for understanding material quality and performance, and also facilitates student projects related to concrete technology and material testing. It is comprehensively equipped with modern instruments to perform tests on materials such as cement, concrete, aggregates, and sand.

### **LABORATORY DETAILS**

|                                      |                             |
|--------------------------------------|-----------------------------|
| Name of the laboratory               | <b>MATERIAL TESTING LAB</b> |
| Carpet area                          | <b>96 m<sup>2</sup></b>     |
| No. of machines or experiment setups | <b>19</b>                   |
| No. of experiments conducted         | <b>22</b>                   |

## SPECIFICATION OF EQUIPMENTS/SETUPS AVAILABLE

| Sl. No | Equipment                        |
|--------|----------------------------------|
| 1      | Compression Testing Machine      |
| 2      | Tile Abrasion Testing            |
| 3      | Concrete Mixer                   |
| 4      | Flexure Testing Machine          |
| 5      | Flexure Strength Testing Machine |
| 6      | Vibration Machine                |
| 7      | Sieve Shaker with Digital Timer  |
| 8      | Compaction Factor Apparatus      |
| 9      | Crushing Value Apparatus         |
| 10     | Platform Balance 500kg           |
| 11     | Electronic Weigh Balance         |
| 12     | Cylindrical Metal Measure 15lt   |
| 13     | Vicat Apparatus                  |
| 14     | Slump Test Apparatus             |
| 15     | Density Basket                   |
| 16     | Cylindrical Metal Measure 3lt    |
| 17     | Le-Chatelier Apparatus           |
| 18     | Common Balance                   |
| 19     | Pycnometer                       |