



# **SNS COLLEGE OF TECHNOLOGY**

*Coimbatore – 641 035*

**An Autonomous Institution**



## **DEPARTMENT OF CIVIL ENGINEERING**

### **23GET102-BASIC CIVIL AND MECHANICAL ENGINEERING**

*I YEAR / I SEMESTER*

#### **UNIT 1 : CIVIL ENGINEERING MATERIALS AND SURVEYING**

*Topic : Building materials*



# UNIT 1 : CIVIL ENGINEERING MATERIALS AND SURVEYING



1. *Introduction to Civil engineering*
2. *Scope of civil engineering*
3. *Building materials*
4. *Brick, stone, cement, concrete, properties-uses*
5. *Introduction to Surveying*
6. *Objectives – types – classification – principles of Surveying*
7. *Measurements of distances, angles*
8. *Concepts of Levelling*
9. *determination of areas*
10. *Illustrative examples.*



# What is Building Materials?

- *Stones, bricks, timber and lime, concrete* are the traditional materials used for the construction of houses and other buildings.
- The invention of *cement and concrete* has provided durable buildings.
- *Reinforced concrete* which is composite construction of *steel and concrete* has helped in building large structures.
- *Steel, aluminium, glass, plastics, glazed tiles, plaster of Paris, paints and varnishes* have improved the quality of buildings.
- Improved versions of many building materials keep on appearing in the market regularly. A civil engineer has to make use of all these materials judiciously.



# Building Materials





# Scope of Civil Engineering



