

**SNS COLLEGE OF TECHNOLOGY** 

(An Autonomous Institution)



## **PORTLAND CEMENT**

**Cement** is an extremely finely ground powder

Possessing adhesive cohesive properties to bind the rigid masses like stones, bricks

## **Composition:**

Oxide	Approximate Weight %
Calcium Oxide (CaO)	30 - 45
Silica (SiO <sub>2</sub> )	10 - 20
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	2 - 7
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1 - 3
Magnesium Oxide (MgO)	0.5 - 3
Sulfate (SO <sub>3</sub> )	1 – 15
Sodium Oxide (Na <sub>2</sub> O)	0.1 - 1
Potassium Oxide (K <sub>2</sub> O)	0.1 - 15

## **Classifications of cement:**

- Natural cement
- Puzzolana cement
- Slag cement
- Portland cement