



## Chapter 1 : Basics of Stress and Strain 1-1 to 1-15

**Syllabus : Basics of stress and strain :** 3 -D state of stress (Concept only) Normal/axial stresses: Tensile & compressive Stresses: Shear and complementary shear Strains: Linear, shear, lateral, thermal and volumetric. Hooke's law, Elastic Constants: Modulus of elasticity, Poisson's ratio, Modulus of rigidity and bulk modulus and relations between them with derivation.

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