CE 8301 Strength of Materials- I

Important 2mark questions

Unit I

1. Define factor of safety.
2. What does the radius of Mohr's circle refer to?
3. Define Poisson's ratio.

Unit II

1. Define shear force.
2. What is meant by section modulus?
3. Draw quantitative shear stress distribution for a T-section.

Unit III

1. What is the deflection at free end of a cantilever carrying central point load 'W'?
2. What are the advantages of compound cylinders?
3. Give the parameters influencing bucking load of along column.

Unit IV

1. Define stiffness.
2. Derive a relation for twisting moment carrying capacity of a solid circular shaft.
3. State Van Mises theory.

Unit V

1. What is redundant frame?
2. Define tension coefficient.
3. Define shear center.