

ASSIGNMENT - IIIrd

- ① Differentiate between Clear span, Effective span and Total span of a beam with the help of sketches.
- ② What are laterally restrained beams? Explain with sketches.
- ③ What are the assumptions made in theory of simple bending?
- ④ Discuss elements of plate girder.
- ⑤ Write short note on stiffeners and their role in plate girders.
- ⑥ How would you differentiate between web buckling and web crippling in case of rolled steel beams?
- ⑦ Design a suitable section of steel beam having an effective span of 8m which carries the super imposed load of 40kN/m. Take $E = 2 \times 10^5 \text{ N/mm}^2$. Apply checks for shear and deflection.