

**DESIGN OF STEEL STRUCTURES**  
**CONTINUOUS ASSESSMENT TEST (CAT)**

**ATTEMPT ALL QUESTIONS**

1. Determine the buckling strength of a W 12 x 50 columns. Its length is 20 ft. For major axis buckling, it is pinned at both ends. For minor buckling, it is pinned at one end and fixed at the other end. [ 15 Marks]
2. A tension member of flat plate having size 200 mm x 10 mm. It is connected to a gusset plate with 6 – bolt (3 bolts in each column of bolt) with chain riveting. Diameter of 16 mm and gauge is 60 mm, pitch of 80 mm. Determine the axial tensile load. [15 Marks]

