

The diameters of the brass and steel segments of the axially loaded bar shown in the figure are 30 mm and 12 mm, respectively. The diameter of the hollow section of the brass segment is 20 mm. Determine: (i) The maximum normal stress in the steel and brass, (ii) The displacement of the free end. Take $E_s = 210 \text{ GPa}$ and $E_b = 105 \text{ GPa}$

