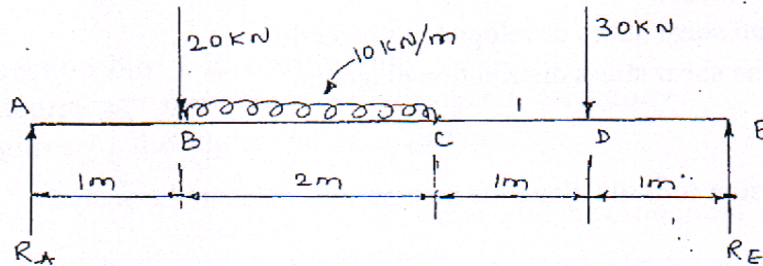
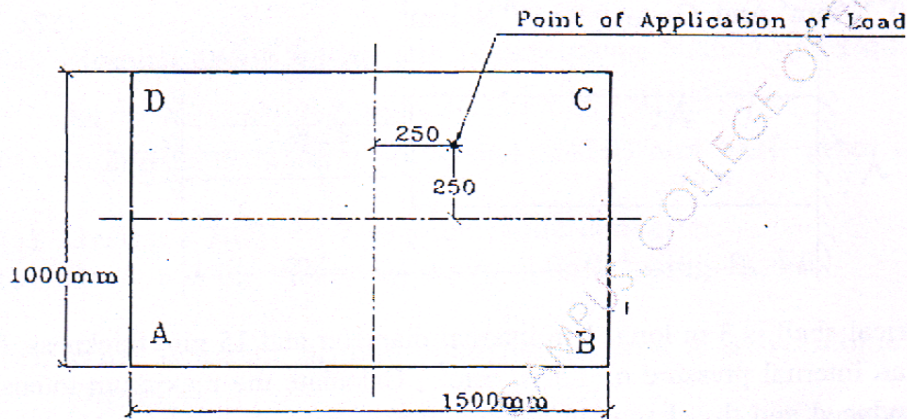


4. (a) Determine the deflection at point B, C and D in the beam shown below. The beam circular cross section of 200mm diameter. Take $E = 200 \text{ GPa}$ (10)



- (b) A rectangular pier is subjected to a compressive load of 450 kN as shown in the figure. Find the stress intensities at the four corners of the pier. (10)



5. (a) A point in a material is subjected to a stress as shown in Fig. Calculate
 (i) Principle stress
 (ii) Max shear stress and also the plane along which it acts (10)

