

NME202/MNE102

ENGG MECHANICS

Morning Shift: May 17, 2015

Q2(c). A steel beam of hollow square section having outside side of 60 mm and inner side of 50 mm is simply supported on a span of 4 m. Find the maximum point load that the beam can carry at the middle of the span if the bending stress is not to exceed 120 N/mm^2 .

Q3(b). Determine the force P required to impend the motion of block B shown in figure 4. Take coefficient of friction as 0.3 for all contact surfaces.

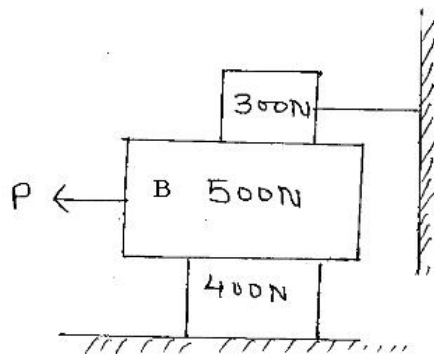


Fig. 4

Q4(a). Determine the SFD and BMD for the beam shown in the figure.

