

Assignment

1. Find the moment of resistance (M_u) of a beam using following data $b=240\text{mm}$; $d=500\text{mm}$; $d'=40\text{mm}$; $A_{st} = 2140\text{mm}^2$; $A_{sc}=1035\text{mm}^2$; Concrete M20 and steel Fe415.
2. A beam $300 \times 600\text{mm}$ effective in section carries a factored moment of 320 kNm at a section. Find the steel required if M20 and Fe415 are used as materials $d'=30\text{mm}$.