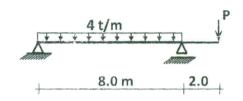


Civil Engineering Academic Number:STE4113 January 20, 2010 Time allowed = 1.5 Hours Full Mark:45 marks

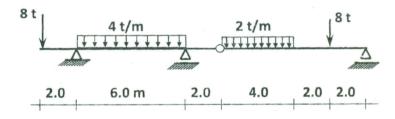
Problem (1)-10 marks

For the shown beam find the magnitude of the force P if the maximum +ve bending moment equales to the maximum -ve moment through the beam and draw the corresponding S.F. and B.M. diagrams.



Problem (2)-20 marks

For the shown beam draw S.F. and B.M. diagrams.



Problem (3)-20 marks

For the frame shown in figure find the reactions and draw the N.F.,S.F. and B.M. diagrams

