

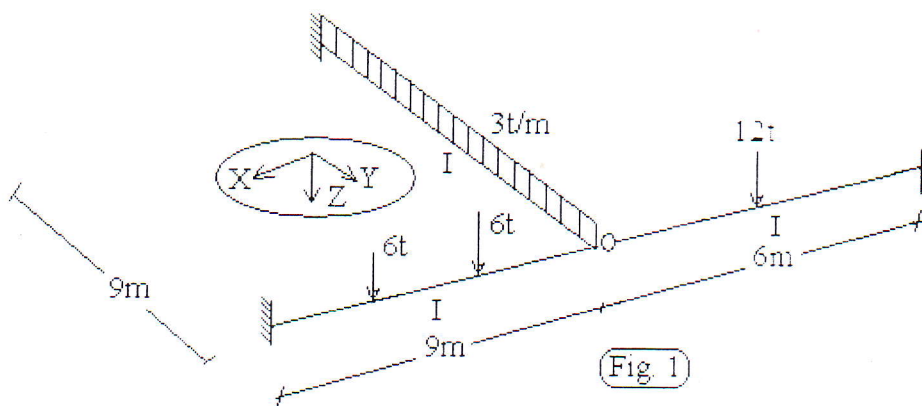
Allowed Tables and Charts: (None or e.g. Steam Tables)

Answer all the following Questions [100 Marks]

Marks

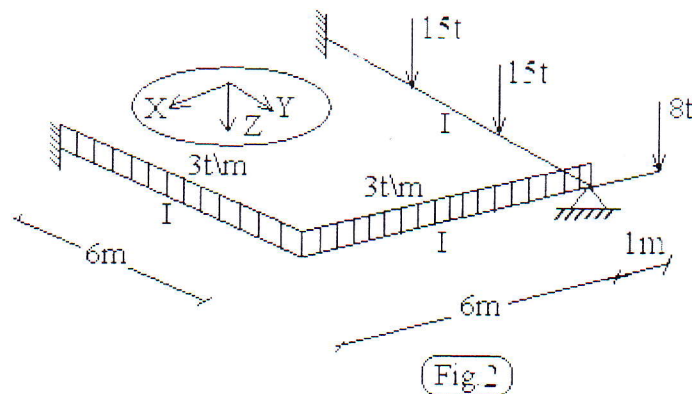
Question (1)

For the shown structure (Constant I), draw shear force, bending moment and torsion moment diagram. [33]



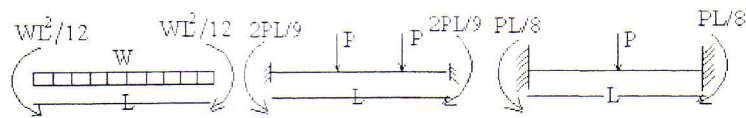
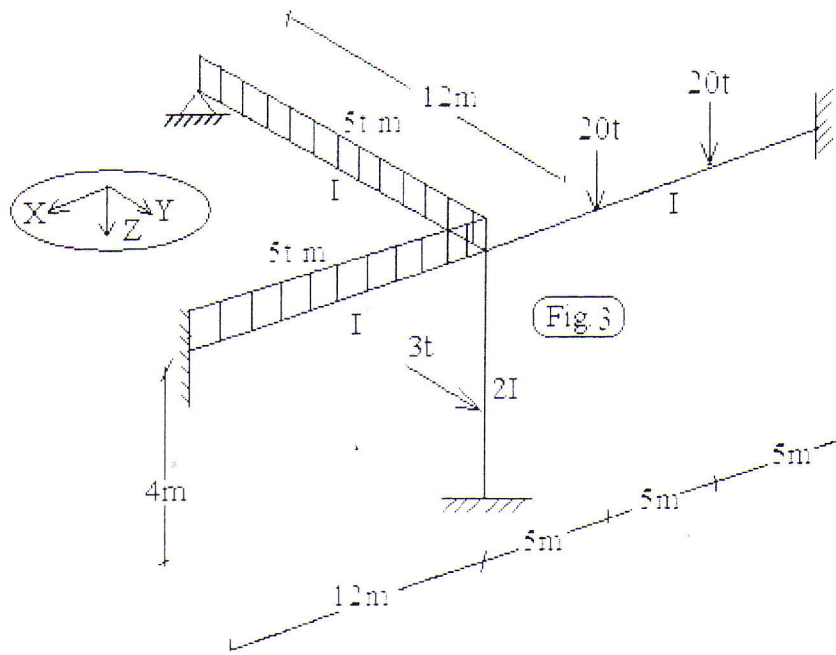
Question (2)

For the shown structure, conclude the overall stiffness matrix. [35]



Question (3)

For the shown structure, draw shear force, bending moment and torsion moment diagram. [35]



*With my best wishes*