Menoufia University
Faculty of Engineering
Shebin El-Kom

Academic Year: 2020-2019

**Date:** 13/8/2020



Department: Civil Eng.

Year: Postgraduate Level 600

Subject/Code: Analysis of structure in

the space

Time Allowed: 3 hours

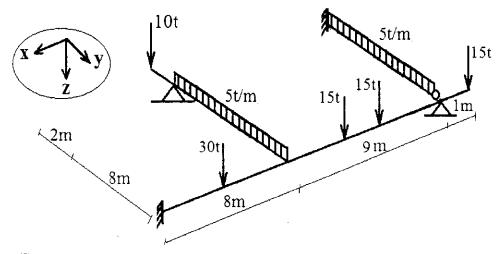
Allowed Tables and Charts: (None or e.g. Steam Tables)

Answer all the following Questions [100 Marks]

**Marks** 

## Question (1)

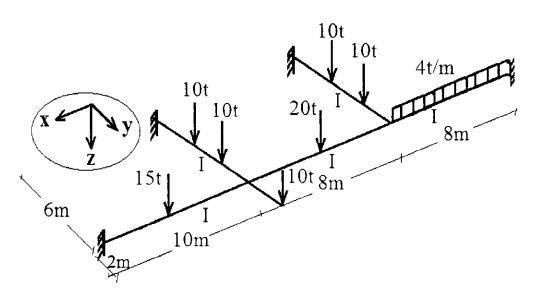
For the shown structure (Constant I), draw shear force, bending moment and torsion moment diagram. [35]



## Question (2)

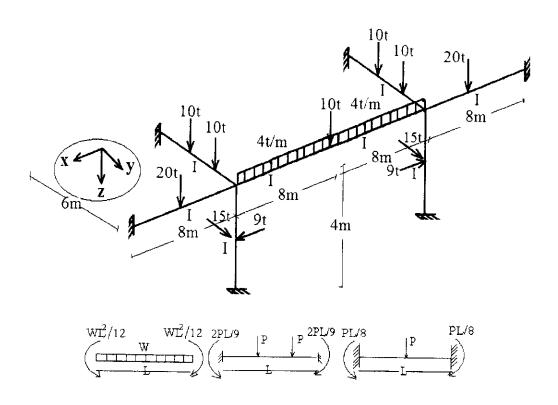
For the shown structure, conclude the overall stiffness matrix.

[35]



Question (3)

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



With my best wishes