Kafrelsheikh University
Faculty of Engineering
Department of Civil Engineering
Arch. Dept., 2nd year, Theory of structures
Dr. GALAL ELSAMAK

Date: 01-01-2019
Time allowed: (3) hours
Full Mark: 35
First term Exam: 1 page
Academic Number: CES2024

Answer as much as you can

1- Find the value of (P) such that maximum positive moment equal to maximum negative bending moment for the shown beam. Then draw B.M.D and S.F.D .
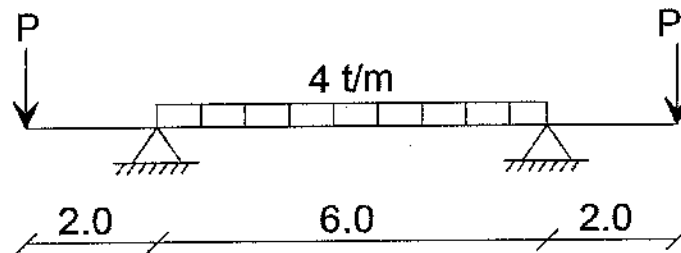

Fig.(1) (6 Marks)

2- Draw N.F., S.F. and B.M.Ds. for the beam shown in Fig. (2). Calculate the position of zero shear.
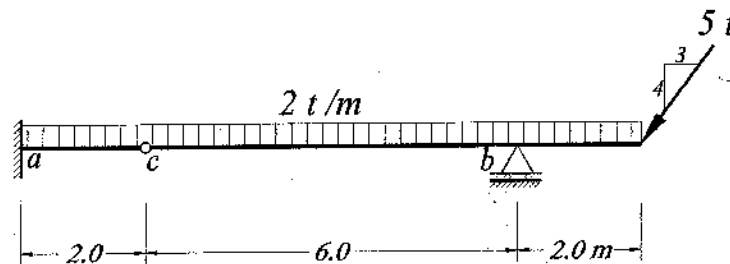

Fig.(2) (15 Marks)

3- Draw N.F., S.F. and B.M.Ds. for the frame shown in Fig. (3).
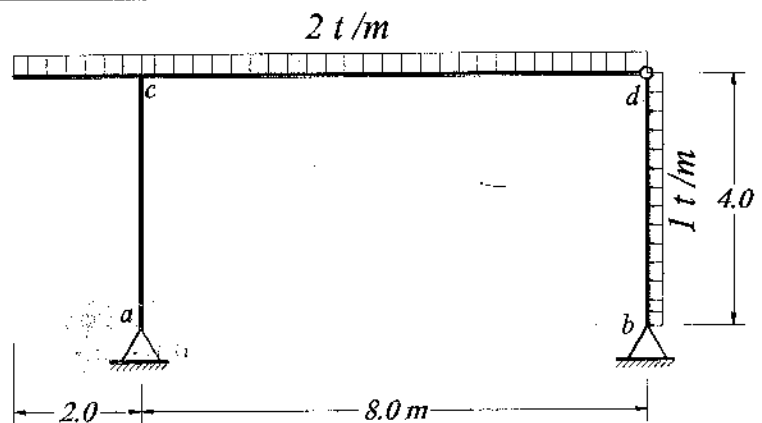

Fig.(3) (10 Marks)

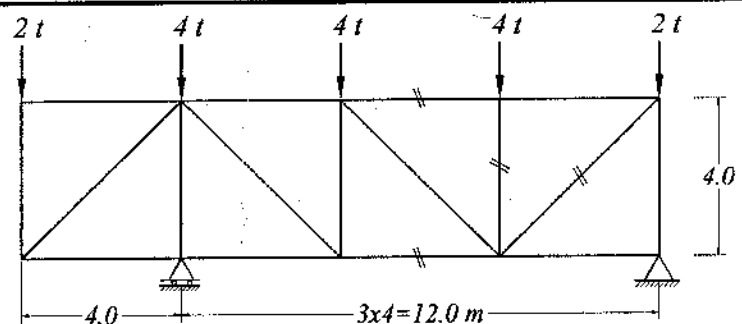4- Find analytically the forces in all the members of the truss shown in Fig.(4)

Fig.(4)

(10 Marks)

Best Wishes: GALAL ELSAMAK