Answer as much as you can

1- Locate the neutral axis and plot the normal stress distribution across the cross section shown in Fig. (1).
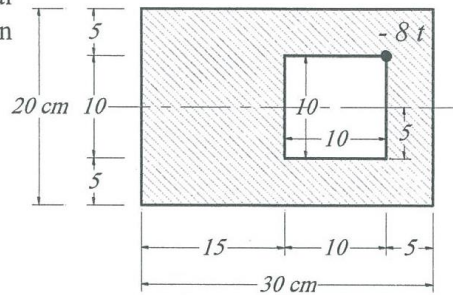

Fig.(1)

(15 Marks)

2- Without any calculation, plot the shear stress distribution diagrams for the cross-sections shown in Fig. (2).
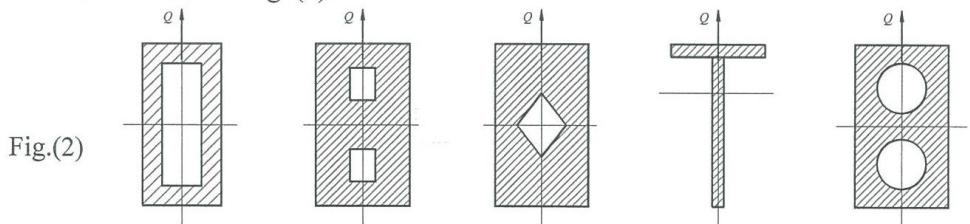

Fig.(2)

(10 Marks)

3- Using the <u>method of consistent deformation</u> [force method], draw N.F, S.F. and B.M.Ds. for the beam shown in Fig. (3). *EI = Constant*
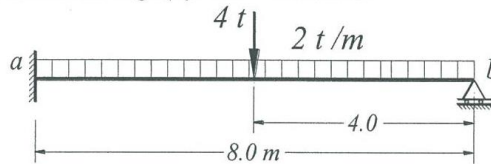

Fig.(3)

(15 Mark)

4- Using the <u>three moments equation method</u>, draw N.F., S.F. and B.M.Ds. for the beam shown in Fig. (4).
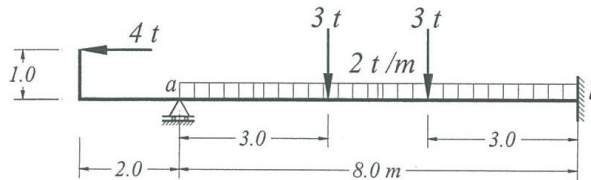

Fig.(4)

(15 Marks)

Best Wishes: *Dr. Magdy Israel*