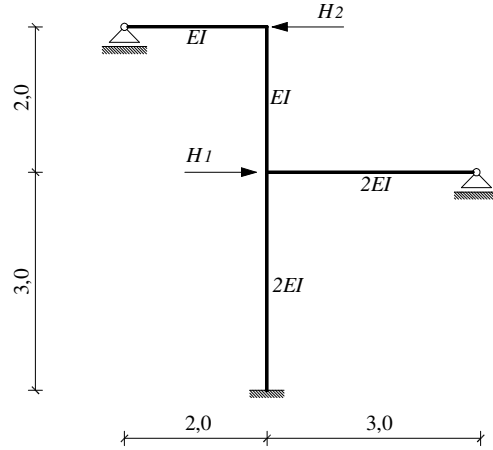


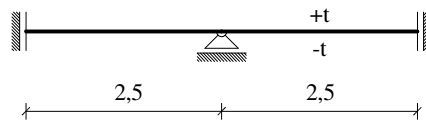
GS 2. – 1. kolokvij za oslobođenje – (2010./2011.)

Z1. (20) Relaksacijskim postupcima odredite momentni dijagram za zadani sustav.



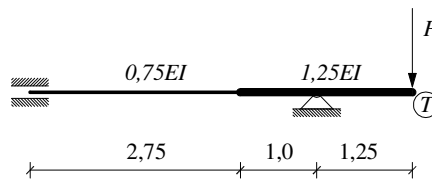
$$\begin{aligned} H_1 &= 200 \text{ kN} \\ H_2 &= 130 \text{ kN} \\ EI &= 120000 \text{ kNm}^2 \end{aligned}$$

Z2. (30) Koristeći simetriju i antimetriju odredite inženjerskom metodom pomaka dijagram momenata savijanja.



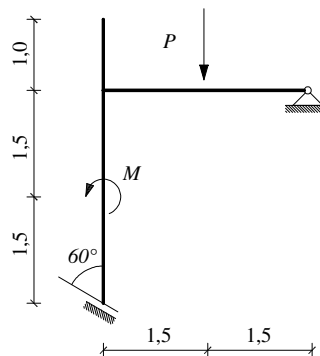
$$\begin{aligned} t &= 25^\circ \text{ C} \\ \alpha_t &= 10^{-5} \text{ K}^{-1} \\ h &= 35 \text{ cm} \\ EI &= 100000 \text{ kNm}^2 \end{aligned}$$

Z3. (25) Odredite vertikalni pomak točke T .



$$\begin{aligned} P &= 145 \text{ kN} \\ EI &= 90000 \text{ kNm}^2 \end{aligned}$$

Z4. (25) Odredite M , T , N dijagrame.



$$\begin{aligned} M &= 100 \text{ kNm} \\ P &= 115 \text{ kN} \\ EI &= 110000 \text{ kNm}^2 \end{aligned}$$