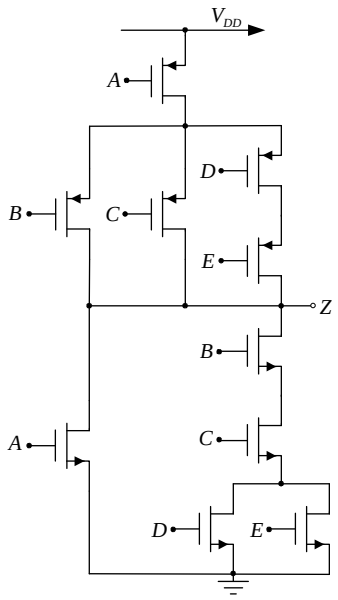
INTEGRALNI ISPIT - REŠENJA ZADATAKA

2. a)



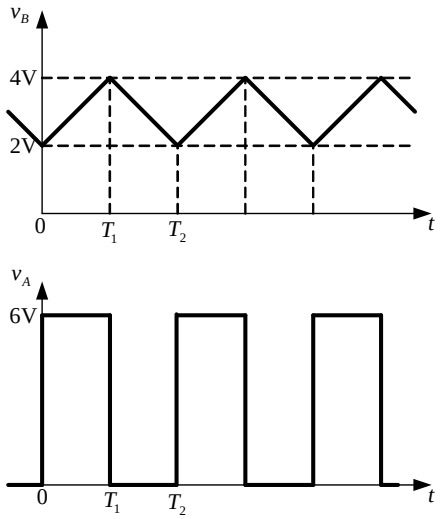
b) $\tau_{pu} = 3 \cdot r_{dsPMOS} \cdot C = 750\text{ps}$

$\tau_{pr} = 3 \cdot r_{dsNMOS} \cdot C = 300\text{ps}$

4. $v_B(t) = V_{TL} - \dfrac{I_1 - I_2}{C} t = 2\text{V} + 10^5 \cdot t$; za $0 \le t \le T_1$; $T_1 = 20\mu\text{s}$.

$v_B(t) = V_{TH} - \dfrac{I_1}{C}(t - T_1) = 4\text{V} - 10^5 \cdot (t - T_1)$; za $T_1 \le t \le T_2$; $T_2 = 40\mu\text{s}$.

$f = \dfrac{1}{T_2} = 25\text{kHz}$.



6. $R_D = 10\text{k}\Omega$, $R_0 = 76\text{k}\Omega$, $R_1 = 33\text{k}\Omega$, $R_2 = 10{,}5\text{k}\Omega$, $R_3 = 750\Omega$