

REŠENJA ZADATAKA

1. a) $I_{D1} = 1\text{mA}$; $I_{D2} = 10\text{mA}$.

b) $a_v = \frac{v_p}{v_u} = g_{m2}R_p = 22.4$.

c) $a_i = \frac{i_p}{i_u} = 1$.

b) $R_u = \frac{v_u}{i_u} = \frac{1}{g_{m2}} = 44.7\Omega$.

4. a)

$v_I[\text{V}] = 4.4\text{V} = \text{const}$, za $-5\text{V} \leq v_G \leq -4.4\text{V}$ (IOP-poz. zasićenje, D_1 -OFF, D_2 -ON);

$v_I[\text{V}] = -v_G[\text{V}]$, za $-4.4\text{V} \leq v_G \leq 0$ (IOP-lin. režim, D_1 -OFF, D_2 -ON);

$v_I[\text{V}] = \frac{2}{3}v_G[\text{V}]$, za $0 \leq v_G \leq 0.9\text{V}$ (IOP-neg. zasićenje, D_1 -OFF, D_2 -OFF);

$v_I[\text{V}] = 0.6\text{V} = \text{const}$, za $0.9\text{V} \leq v_G \leq 5\text{V}$ (IOP-neg. zasićenje, D_1 -ON, D_2 -OFF).