

REŠENJA ZADATAKA

1. a) $I_{D1} = 1\text{mA}$; $I_{D2} = 100\mu\text{A}$.

b) $a = \frac{v_p}{v_u} = -g_{m1}(R_3 \parallel R_P) \frac{R_2}{R_1 + R_2} \approx -2.53$.

c) $R_u = R_1 + R_2 = 5.05\text{k}\Omega$; $R_i = R_3 = 1.2\text{k}\Omega$.

4.

$v_I[\text{V}] = -12\text{V} = \text{const}$, za $-12\text{V} \leq v_G \leq -4.5\text{V}$ (IOP-neg. zasićenje, D -ON);

$v_I[\text{V}] = 2v_G[\text{V}] - 3$, za $-4.5\text{V} \leq v_G \leq -1.5\text{V}$ (IOP-lin. režim, D -ON);

$v_I[\text{V}] = 4v_G[\text{V}]$, za $-1.5\text{V} \leq v_G \leq 3\text{V}$ (IOP- lin. režim, D -OFF);

$v_I[\text{V}] = 12\text{V} = \text{const}$, za $3\text{V} \leq v_G \leq 12\text{V}$ (IOP-poz. zasićenje, D -OFF).