

REŠENJA ZADATAKA**1.**

$$i_C[\text{mA}] = 0, \text{ za } 0 \leq v_G \leq 0.7\text{V (DZ-OFF, Q-OFF);}$$

$$i_C[\text{mA}] = 10v_G[\text{V}] - 7, \text{ za } 0.7\text{V} \leq v_G \leq 1.7\text{V (DZ-OFF, Q-DAR);}$$

$$i_C[\text{mA}] = 6.645v_G[\text{V}] - 1.296, \text{ za } 1.7\text{V} \leq v_G \leq 4.86\text{V (DZ-OFF, Q-zasićenje);}$$

$$i_C[\text{mA}] = 31, \text{ za } 4.86 \leq v_G \leq 6\text{V (DZ-proboj, Q-zasićenje).}$$

4.

$$\text{a) } I_{D1} = I_0 = 1\text{mA}; \quad I_{D2} = I_0 = 1\text{mA}.$$

$$\text{b) } a_{d1} = \frac{v_{i1}}{v_d} = -\frac{g_{m1} \left(R_D \parallel \frac{R_P}{2} \right)}{2 + g_{m1} R_S} = -2.083.$$

$$\text{c) } a_{s1} = \frac{v_{i1}}{v_s} = 0.$$