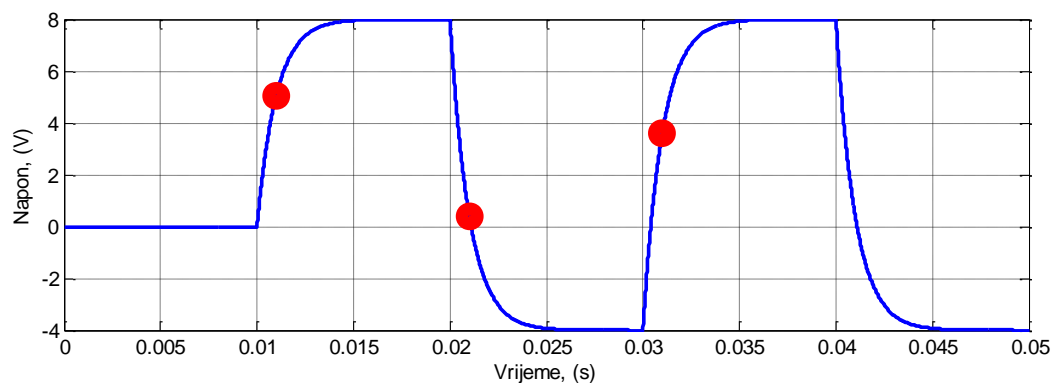# RJEŠENJA MEĐUISPITA IZ ELEKTRONIKE 1

ZADACI

ZADATAK 1.

a) $R_1 = 75\ \Omega$

b) $u_{IZ}\ (t = 11\ \text{ms}) = 5{,}05\ \text{V}$

$u_{IZ}\ (t = 21\ \text{ms}) = 0{,}41\ \text{V}$

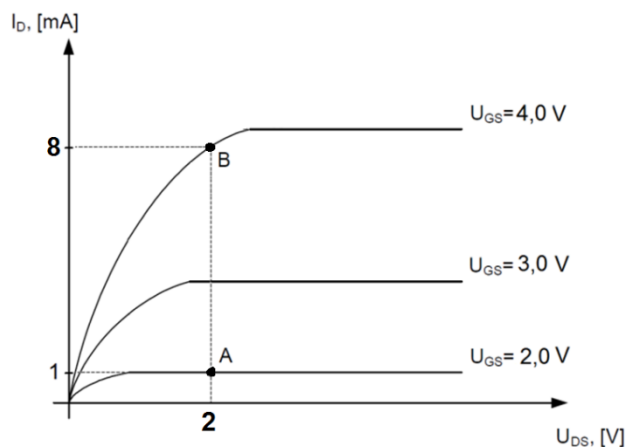$u_{IZ}\ (t = 31\ \text{ms}) = 3{,}59\ \text{V}$

c) skica:

ZADATAK 2.

a) akceptori, $N_{A1} = 1{,}11 \cdot 10^{17}\ \text{cm}^{-3}$

b) donori, $E_{F2} = E_C - 0{,}156\ \text{eV}$

c) $\sigma_1 = 5{,}68\ \text{S/cm}$

$\sigma_2 = 10{,}68\ \text{S/cm}$

d) $U = 2\ \text{V}$

ZADATAK 3.

a) $W_p = 5{,}63\ \mu\text{m}$

b) $t_n = 4{,}7\ \text{ns}$, $Q_n = 23{,}5\ \text{pC}$

c) $r_d = 26{,}9\ \text{M}\Omega$ @ 0,1 V, $r_d = 1{,}1\ \Omega$ @ 0,54 V

ZADATAK 4.

a) n-kanalni MOSFET obogaćenog tipa

b) $I_{DB} = 8\ \text{mA}$

c) $t_{ox} = 8{,}6\ \text{nm}$

d) skica:

PITANJA

	A	B	C	D
1.	D	E	A	C
2.	C	E	D	C
3.	D	A	E	C
4.	D	B	A	E
5.	C	B	E	D
6.	E	C	B	D
7.	A	B	E	D