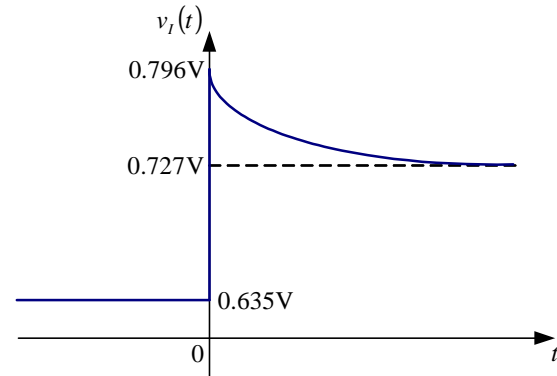


## REŠENJA ZADATAKA

### 1. KOLOKVIJUM

2.

$$v_I(t) = \begin{cases} 0.635\text{V} = \text{const}, & \text{za } t < 0 \\ 0.727\text{V} + 0.069 \cdot e^{-\frac{t}{118.44\mu\text{s}}}, & \text{za } t > 0 \end{cases}$$



### 2. KOLOKVIJUM

2. za  $0 < t < T_1$ :

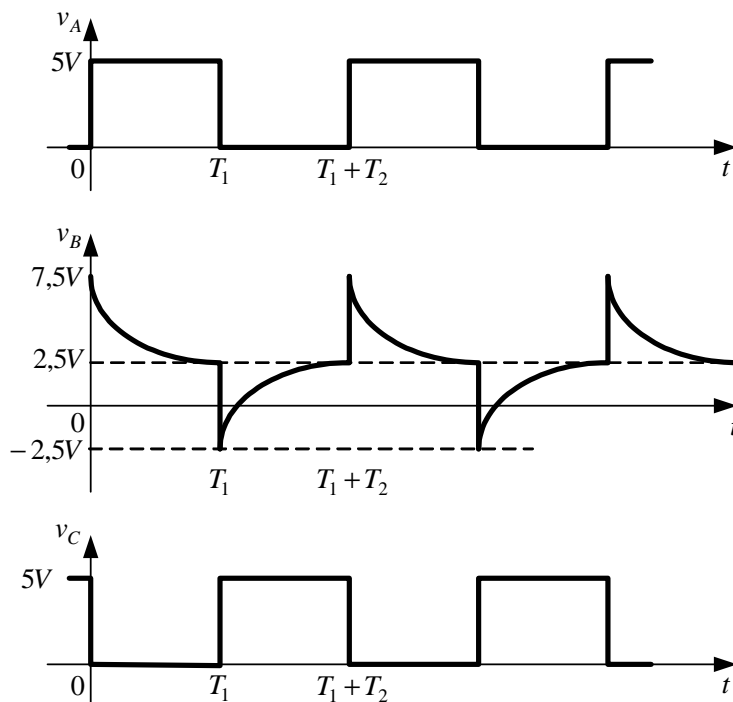
$$v_B(t) = 7,5\text{V} \cdot e^{-2000t}$$

za  $T_1 < t < T_1 + T_2$ :

$$v_B(t) = 5\text{V} - 7,5\text{V} \cdot e^{-2000(t-T_1)}$$

$$T_1 = 549,3\mu\text{s}$$

$$T_2 = 549,3\mu\text{s}$$



### 3. KOLOKVIJUM

2. a) 
$$v_I = -\frac{3}{5} \cdot (8\overline{Q_3} + 4\overline{Q_2} + 2\overline{Q_1} + \overline{Q_0}).$$

b) Analogni izlazni napon D/A konvertora je minimalan za  $Q_3Q_2Q_1Q_0 = 0000$  i iznosi  $v_{I\text{min}} = -9\text{V}$ .

c) Analogni izlazni napon D/A konvertora je maksimalan za  $Q_3Q_2Q_1Q_0 = 1111$  i iznosi  $v_{I\text{max}} = 0$ .