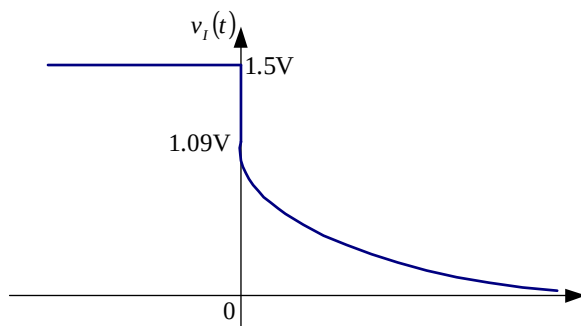


REŠENJA ZADATAKA

1. KOLOKVIJUM

2.

$$v_I(t) = \begin{cases} 1.5V = \text{const}, & \text{za } t < 0 \\ 1.09V \cdot e^{-\frac{t}{366.67\mu s}}, & \text{za } t > 0 \end{cases}$$



2. KOLOKVIJUM

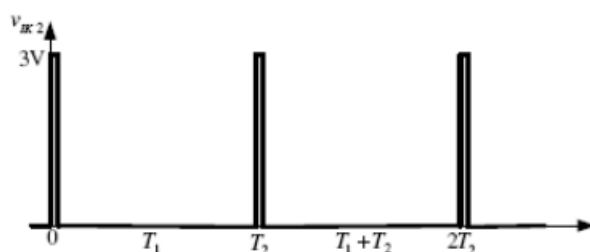
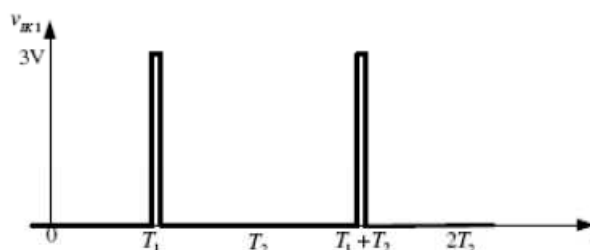
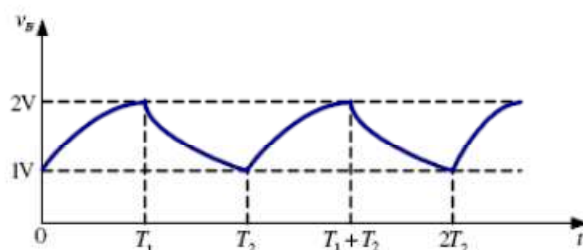
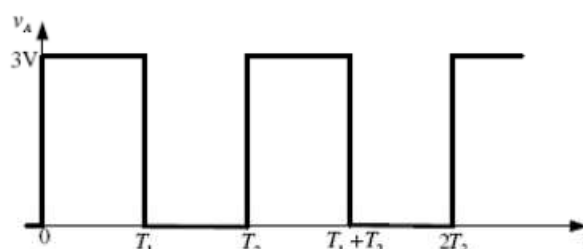
$$2. \ v_B(t) = 3V - 2V \cdot e^{-\frac{t}{100\mu s}}, \text{ za } 0 < t < T_1$$

$$v_B(t) = 2V \cdot e^{-\frac{t-T_1}{100\mu s}}, \text{ za } T_1 < t < T_2$$

$$T_1 = 69,3\mu s$$

$$T_2 = 138,6\mu s$$

$$f = \frac{1}{T_2} = 7,21\text{kHz}$$



3. KOLOKVIJUM

2. a) $v_{IZ} = -\frac{V_{REF}}{48R} R_f (8Q_3 + 4Q_2 + 2Q_1 + Q_0).$

b) $R_f = 2,4\text{k}\Omega.$

S obzirom da je D/A konvertor unipolaran i da je $v_{IZ} \geq 0$, na osnovu rezultata iz tačke a) sledi da mora biti $V_{REF} < 0$.