VASILE   GEORGE

↓   ↓
86   71

iD = 58

$U_0 = \dfrac{58}{45} + 7,5 = \dfrac{58}{45} + 7,5 \simeq 8,79 V$

$U_1 = \dfrac{58}{35} + 5,5 = 6,16 V$

$R = 1 kk_2 \qquad T = \dfrac{1}{5} = 1 ms$

$u(t) = U_0 + U_1 \sin(\omega t) = 8,79 + 6,16 \sin(2\pi \, 1000 \, t)$

a) $R_C = 10 \, m\Omega \gg T = 1 ms$

$U_{out} \simeq U_0 + U_1 = 8,79 + 6,16 = 14,95 \, V$

$U = U_0 + \dfrac{U_1}{2} = 8,79 + 3,08 = 11,92V$

$\Rightarrow U_{inbut} = 14,95 V$

b) $R_c = 1 m\Omega = T$

$U_{indut} \simeq U_0 + \dfrac{U_1}{2} = 8,79 \times 3,08 = 11,87V$

c) $R_c = 10 N\Omega$ th $<< T = 1ms$

$U_{indut} = U_0 = 8,79$