Beispielklausur 1

A1 $U_q = 9{,}04\text{V}$; $R_i = 50{,}5\text{m}\Omega$ **A2** $I_5 = 0{,}75\text{A}$; $P_{AB} = 15{,}5\text{W}$

A3 $I_1 = 1{,}37\text{A}$; $I_2 = 2{,}44\text{A}$; $I_5 = -1{,}07\text{A}$ **A4** $R_{is} = 1{,}03\text{M}\Omega$

A5 $u_C(0) = 5\text{V}$; $u_C(\infty) = 10\text{V}$; $i_C(0) = 62{,}5\text{mA}$; $i_C(\infty) = 0\text{A}$;

$u_{R1}(0) = 3{,}125\text{V}$; $u_{R1}(\infty) = 0\text{V}$; $\tau = 88\mu\text{s}$

A6 $A_D = 2{,}73\text{cm}^2$

Beispielklausur 2

B1 $R_i = 97\text{m}\Omega$; $R_a = 1{,}12\Omega$ **B2** $U_3 = 2{,}1\text{V}$; $P_{AB} = 25{,}4\text{W}$

B3 $I_1 = 2{,}9\text{A}$; $I_2 = 3{,}4\text{A}$; $I_5 = 0{,}5\text{A}$ **B4** $C = 41{,}2\text{ nF}$

B5 $u_C(0) = 7{,}5\text{V}$; $u_C(\infty) = 0\text{V}$; $i_C(0) = -150\text{mA}$; $i_C(\infty) = 0\text{A}$;

$u_{R1}(0) = -7{,}5\text{V}$; $u_{R1}(\infty) = 0\text{V}$; $\tau = 135\mu\text{s}$

B6 $\Theta = 199\text{A}$

Beispielklausur 3

A1 $R_{ab} = 2{,}4\Omega$; $I_0 = 5\text{A}$; $I_6 = 3\text{A}$; $U_5 = 7.5\text{V}$; $P_1 = 24\text{W}$ **A2** $I_3 = 1{,}45\text{A}$ **A3** $R_{is} = 1{,}29\text{M}\Omega$

A4 $t_s = 2{,}93\text{h}$ **A5** $\Theta = 287\text{A}$.

Beispielklausur 4

B1 $R_{ab} = 1{,}25\Omega$; $I_0 = 8\text{A}$; $I_6 = 4\text{A}$; $U_5 = 5\text{V}$; $P_2 = 20\text{W}$ **B2** $I_3 = 1{,}21\text{A}$ **B3** $C = 27{,}46\text{ nF}$

B4 $t_s = 0{,}52\text{h}$ **B5** $l_{Fe} = 13.6\text{cm}$

Beispielklausur 5

1 $I = 4{,}6\text{A}$; $U = 4{,}3\text{V}$

2 $U_{10} = 29{,}14\text{V}$; $U_{20} = 3{,}43\text{V}$; $I_1 = -0{,}13\text{A}$; $I_2 = 0{,}73\text{A}$; $I_3 = 0.86\text{A}$; $I_4 = -1{,}03\text{A}$; $I_5 = 0{,}17\text{A}$

3 $D = 4{,}15 \cdot 10^{-6} \dfrac{\text{A} \cdot \text{s}}{\text{m}^2}$; $Q = 6{,}23 \cdot 10^{-9}\text{C}$; $C_{ers} = 1{,}246\text{pF}$; $E_1 = 62{,}5 \dfrac{\text{V}}{\text{mm}}$; $E_2 = 468{,}75 \dfrac{\text{V}}{\text{mm}}$;

$U_1 = 312{,}5\text{V}$; $U_2 = 4687\text{V}$

4 $u_C(0) = 12\text{V}$; $u_C(\infty) = 17{,}14\text{V}$; $\tau = 0{,}78\mu\text{s}$

5 $H = 9{,}4 \dfrac{\text{A}}{\text{m}}$

Beispielklausur 6

1 $U_1 = 132\text{V}$; $U_3 = 8{,}9\text{V}$

2 $U_{10} = 0{,}185\text{V}$; $U_{20} = -0{,}646\text{V}$; $I_1 = 0{,}646\text{A}$; $I_2 = -0{,}046\text{A}$;

$I_3 = -0{,}462\text{A}$; $I_4 = 0{,}092\text{A}$; $I_5 = 0{,}785\text{A}$; $I_6 = -0{,}323\text{A}$

3 $R_{is} = 1{,}273\Omega$

4 $u_C(0) = 0\text{V}$; $u_C(\infty) = -4{,}67\text{V}$; $i_C(0) = -0{,}0452\text{A}$; $i_C(\infty) = 0\text{A}$;

$i_1(0) = 0\text{A}$; $i_1(\infty) = -0{,}108\text{A}$; $\tau = 227{,}3\mu\text{s}$

5 $R_{m\delta\sigma} = 2{,}4 \cdot 10^6 \dfrac{\text{A}}{\text{V} \cdot \text{s}}$; $B_\delta = 0{,}4\text{T}$; $H_\delta = 31{,}3 \dfrac{\text{A}}{\text{m}}$