

### 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**  $D = 4.15 \cdot 10^{-6} \frac{\text{A} \cdot \text{s}}{\text{m}^2}$ ,  $Q = 6.23 \cdot 10^{-9} \text{C}$ ,  $C_{\text{ers}} = 1.246\text{pF}$ ,  $E_1 = 62.5 \frac{\text{V}}{\text{mm}}$ ,  $E_2 = 468.75 \frac{\text{V}}{\text{mm}}$ ,

$U_1 = 312.5\text{V}$ ,  $U_2 = 4687\text{V}$ ;

**4**  $u_C(0) = 12\text{V}$ ,  $u_C(\infty) = 17.14\text{V}$ ,  $\tau = 0.78\mu\text{s}$ ;

**5**  $H = 9.4 \frac{\text{A}}{\text{m}}$

### 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**  $u_C(0) = 5\text{V}$ ,  $u_C(\infty) = -4.67\text{V}$ ,  $i_C(0) = -94\text{mA}$ ,  $i_C(\infty) = 0\text{A}$ ,  
 $i_1(0) = -224\text{mA}$ ,  $i_1(\infty) = -193\text{mA}$ ,  $\tau = 227.3\mu\text{s}$ ;

**5**  $R_{m\delta\sigma} = 2.4 \cdot 10^6 \frac{\text{A}}{\text{V} \cdot \text{s}}$ ,  $B_\delta = 0.4\text{T}$ ,  $H_\delta = 31.3 \frac{\text{A}}{\text{m}}$ .