② a) isto kot že na prejšnem kolokviju

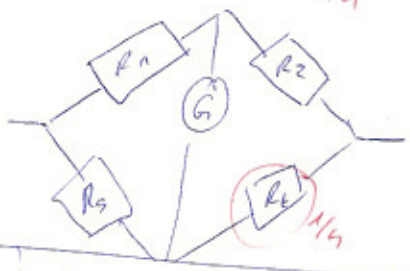
$M_2 = 255'016\ g/mol$ 1/2

$\frac{dM_2}{M_2} = 0'07853 \approx 0'08$ 1/4

$dM_2 = 20\ g/mol$ 1/4

$M_2 = (260 \pm 20)\ g/mol = 260(1 \pm 0'08)\ g/mol$ 1/4 1/4

b) Wheatstoneov most 1/4



silen 1/2

1/4

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④ b) Hg termometer

Pt upornostni termometer

termoelem

opisi 1/2

a) $R = R_0(1 + at + bt^2)$

$bt^2 + at + 1 - \frac{R}{R_0} = 0$

$t_1 = 63'0265\,°C$ 1/2

$t_2 = 65'1133\,°C$

$\Delta T = 2'0868\,°C$ 1/2

$dR = R_0(a\,dt + 2b\,dt)$

$dt = \frac{dR}{R_0(a + 2bt)}$

$dt_1 = 0'2607\,°C$

$dt_2 = 0'2609\,°C$

$d\Delta T = dt_1 + dt_2 = 0'52\,°C$ 1/2

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③ a) $\gamma_{H_2O} = 72'7814\ din/cm$ 1/4

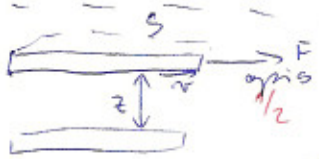
$\rho = 1'05 \cdot \rho_{H_2O}$ 1/4

$\frac{\gamma}{\gamma_{H_2O}} = \frac{M_{H_2O} \cdot \rho}{M \cdot \rho_{H_2O}}$

$\gamma = \gamma_{H_2O} \frac{M_{H_2O} \cdot \rho}{M \cdot \rho_{H_2O}} = 72'7814 \frac{din}{cm} \cdot \frac{18}{48'8} \cdot 1'05$

$\gamma = 73'1239\ \frac{din}{cm}$ 1

b)



opis 1/2

$\frac{F}{S} = \eta \cdot \frac{v}{z}$ 1/2

sile viskozitet

prosim. gradient hitrosti

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①

$\ln c$	-0'6088	-1'3665	-2'0794	-3'1942
t	120	160	200	280

1/2

$k = -\frac{-3'4 + 0'6}{280 - 120} = 0'0175\ s^{-1}$

$t_{1/2} = 39'608\ s$ 1/2 $t_{1/2} = \frac{\ln 2}{k}$

$k_1 = -\frac{-3'2 + 0'7}{280 - 120} = 0'01562\ s^{-1}$

$k_2 = -\frac{-3'5 + 0'5}{280 - 120} = 0'01875\ s^{-1}$

$\frac{dt_{1/2}}{t_{1/2}} = \frac{dk}{k} = \frac{0'00188}{0'0175} \approx 0'1$

$dt_{1/2} \approx 4\ s$

$t_{1/2} = (40 \pm 4)\ s = 40(1 \pm 0'1)\ s$ 1/2

$\ln C_{02} = 1'15$

$\ln C_{01} = 1'85$

$\ln C_0 = 1'5$

$C_0 = 4'482\ mol/l$ 1/2 $\Delta C_0 = 2\ mol/l$

$C_{01} = 3'158\ mol/l$

$C_{02} = 6'3598\ mol/l$

$C_0 = (4 \pm 2)\ mol/l$ 1/2

$C_0 = 4(1 \pm 0'5)\ mol/l$