1. Kondensatornetzwerk

$$C_1 = 450\ \text{nF}; \quad C_2 = 300\ \text{nF}; \quad C_3 = 600\ \text{nF}; \quad C_4 = 100\ \text{nF}$$

2. Wickelkondensator

$$k = \frac{1}{4\pi\epsilon_0}; \quad d = 2.0 * 10^{-5}\ \text{m}; \quad b = 0.02\ \text{m}; \quad C = 100\ \text{nF}; \quad \epsilon = 2.3$$

(a) $\omega = \sqrt{\frac{mgl}{I}}$

$$I = \frac{1}{12} m(a^2 + h^2) + ml^2 = 0.12\ \text{kg m}^2$$

$$\omega_a = \sqrt{\frac{mgl}{I}} = \underline{\underline{6.37\ \text{rad/s}}}$$

(b) $F = -m\omega^2 x; \quad \Delta x = x_1 - x_2$