



ИСПИТ ИЗ ОСНОВА ЕЛЕКТРОТЕХНИКЕ 1

29. 04. 2014. - Рјешења

1.

$$E = 18\sqrt{2} \text{ V/m.}$$

2.

$$R_2 = 20 \text{ cm.}$$

3.

a) $E'_0 = 4,5 \text{ MV/m}$ и $E_1 = 2,25 \text{ MV/m}$.

б) $U'_c = 10 \text{ kV}$.

4.

$$P_{E1} = -0,5 \text{ W,}$$

$$P_{E2} = 14 \text{ W,}$$

$$P_{R3} = 1,5 \text{ W,}$$

$$P_{R4} = 3,75 \text{ W.}$$

5.

$$I_1 = 0, I_3 = 1 \text{ A, } I_4 = 0, I_{E2} = -3 \text{ A, } I_5 = 2 \text{ A,}$$

$$P_{E1} = 0, P_{E2} = -15 \text{ W, } P_{E3} = -50 \text{ W,}$$

$$P_{g1} = 160 \text{ W, } P_{g2} = 100 \text{ W, } P_{g3} = 5 \text{ W.}$$

6.

$$R_4 = 2 \text{ k}\Omega.$$