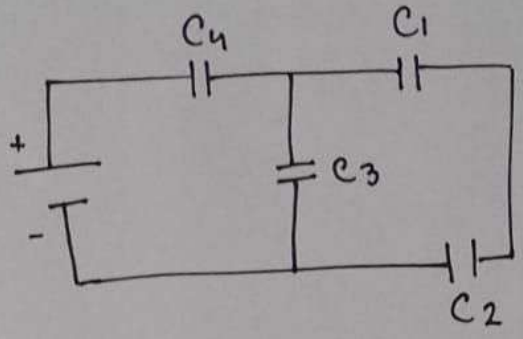
①



$*C_2 = K \cdot C_2$

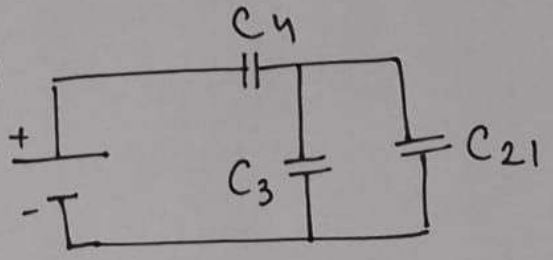
$C_2 = K C_0$

$C = \frac{Q}{V}$

① → C_1 y C_2 en Serie:

$$\Rightarrow \frac{1}{C_{21}} = \frac{1}{C_1} + \frac{1}{C_2}$$

②



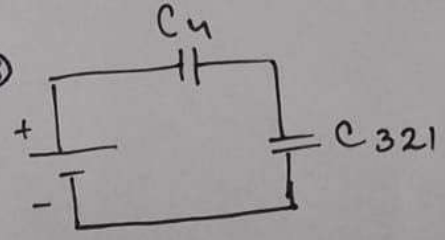
$$V_{21} = V_2 + V_1$$

$$Q_{21} = Q_1 = Q_2$$

② → C_{21} y C_3 en Paralelo:

$$\Rightarrow C_{321} = C_{21} + C_3$$

③



$$V_{321} = V_{21} = V_3 \quad (a)$$

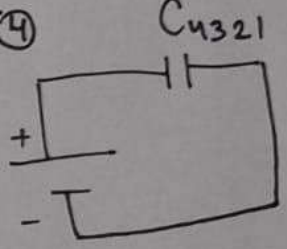
$$Q_{321} = Q_{21} + Q_3 \quad (b)$$

$Q_3 = C_3 \cdot V_3$

③ → C_{321} y C_4 en Serie:

$$\Rightarrow \frac{1}{C_{4321}} = \frac{1}{C_{321}} + \frac{1}{C_4}$$

④



$$V_{4321} = V_{321} + V_4 \quad (b)$$

$$Q_{4321} = Q_{321} = Q_4$$

$V_4 = \frac{Q_4}{C_4}$

→ $C_{eq} = C_{4321}$ → $U = \frac{1}{2} C_{eq} V^2$ (c)