When two conducting spheres are connected by a conducting wire, charge will flow from one sphere (with higher potential) to the other (with lower potential) till both acquire the same potential.

$$\therefore \quad V_A = V_B \text{ or } \frac{1}{4\pi\varepsilon_0}\frac{q_A}{r_A} = \frac{1}{4\pi\varepsilon_0}\frac{q_B}{r_B}$$

$$\text{or } \frac{q_A}{q_B} = \frac{r_A}{r_B} = \frac{5}{10} \text{ or } \frac{q_A}{q_B} = \frac{1}{2}$$

Now, the ratio of electric fields, $\frac{E_1}{E_2} = \frac{K\frac{q_A}{r_A^2}}{K\frac{q_B}{r_B^2}}$

$$\text{or } \frac{E_1}{E_2} = \frac{q_A}{q_B} \times \frac{r_B^2}{r_A^2} = \frac{1}{2} \times \left(\frac{10}{5}\right)^2 \text{ or } \frac{E_1}{E_2} = \frac{2}{1}$$