

# Cells

① Series

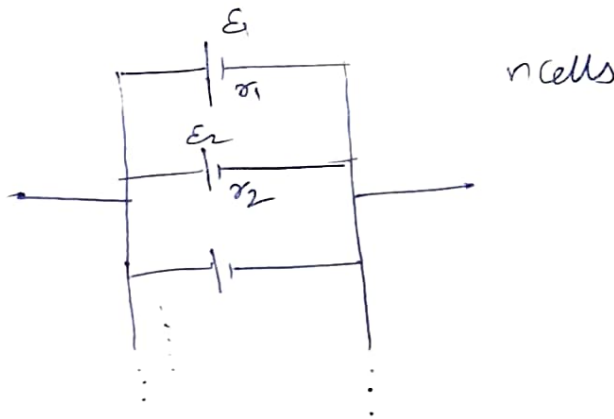


$$R_{eq} = R_1 + R_2 + \dots + R_n \quad (\text{in series})$$

$$\therefore r_{eq} = r_1 + r_2 + \dots + r_n$$

$$\therefore E_{eq} = E_1 + E_2 + \dots + E_n \quad (\text{Similar to equivalent resistance})$$

② Parallel



$$\text{In parallel} \quad \frac{1}{R_{eq}} = \frac{1}{R_1} + \frac{1}{R_2} + \dots + \frac{1}{R_n}$$

$$\frac{1}{r_{eq}} = \frac{1}{r_1} + \frac{1}{r_2} + \dots + \frac{1}{r_n}$$

$$\frac{E_{eq}}{r_{eq}} = \frac{E_1}{r_1} + \frac{E_2}{r_2} + \dots + \frac{E_n}{r_n} \quad (\text{similar to equivalent resistance})$$