

PYQSide

JEE MAIN CURRENT ELECTRICITY — CELLS IN SERIES AND PARALLEL — PYQS

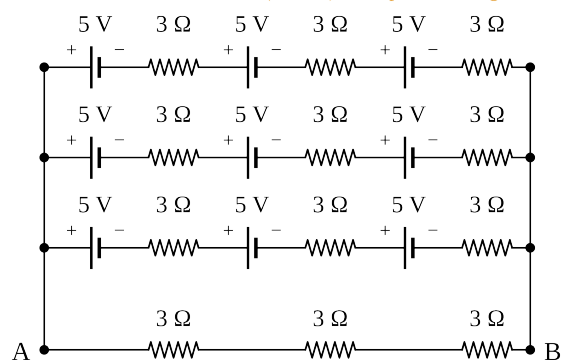
Max. Marks: 16

Questions: 4

Section A (MCQ)

- Q.1** Refer to the figure given below, current between terminals A and B is _____ A.

[JEE Main 2026 (Online) 5th April Morning Shift]



- (1) 12.5 (2) 1.25 (3) 7.5 (4) 5

Scan or tap for the full solution



- Q.2** For the two cells having same EMF E and internal resistance r , the current passing through the external resistor $6\ \Omega$ is same when both the cells are connected either in parallel or in series. The value of internal resistance r is _____ Ω .

[JEE Main 2026 (Online) 28th January Morning Shift]

- (1) 3 (2) 6 (3) 4 (4) 9

Scan or tap for the full solution



Section B (Numerical)

- Q.3** Two cells of emfs 1 V and 2 V and internal resistance $2\ \Omega$ and $1\ \Omega$, respectively connected in parallel, gave a current of 1 A through an external resistance. If the polarity of one cell is reversed, then value of current through the external resistance will be $\frac{\alpha}{5}\text{ A}$. The value of α is _____.

[JEE Main 2026 (Online) 6th April Evening Shift]

Scan or tap for the full solution



- Q.4** Two cells of emfs 1 V and 2 V and internal resistances $2\ \Omega$ and $1\ \Omega$, respectively, are connected in series with an external resistance of $6\ \Omega$. The total current in the circuit is I_1 . Now the same two cells in parallel configuration are connected to same external resistance. In this case, the total current drawn is I_2 . The value of $\left(\frac{I_1}{I_2}\right)$ is $\frac{x}{3}$. The value of x is _____.

[JEE Main 2025 (Online) 3rd April Evening Shift]

Scan or tap for the full solution



ANSWER KEY

Section A (MCQ)

Ques.	1	2												
Ans.	2	2												

Section B (Numerical)

Ques.	3	4												
Ans.	3	4												