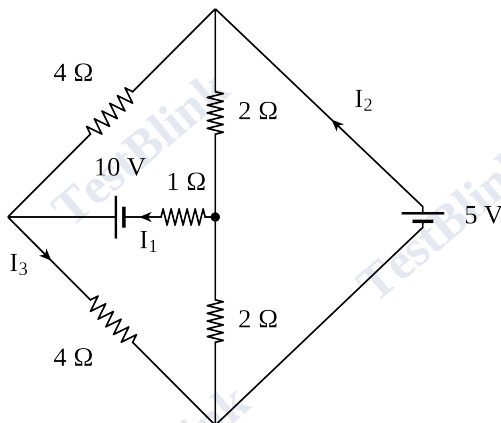


JEE MAIN CURRENT ELECTRICITY — KIRCHHOFF'S RULES — PYQS
Max. Marks: 16
Questions: 4
Section A (MCQ) — 3 questions

Q.1 Refer to the figure given below. The values of I_1 , I_2 and I_3 are _____.

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



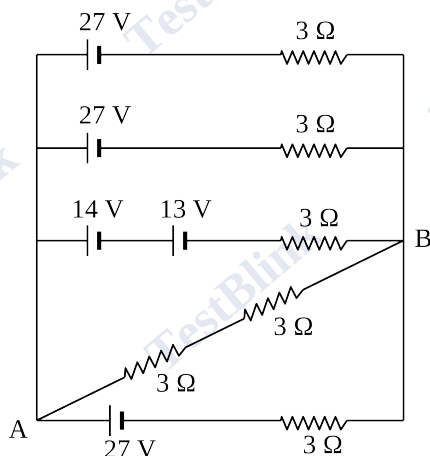
- (1) $I_1 = 2.5 \text{ A}$, $I_2 = 1.875 \text{ A}$, $I_3 = 1.875 \text{ A}$
 (2) $I_1 = 1.875 \text{ A}$, $I_2 = 2.5 \text{ A}$, $I_3 = 1.875 \text{ A}$
 (3) $I_1 = 1.875 \text{ A}$, $I_2 = 1.875 \text{ A}$, $I_3 = 2.5 \text{ A}$
 (4) $I_1 = 2.5 \text{ A}$, $I_2 = 2.5 \text{ A}$, $I_3 = 1.875 \text{ A}$

Scan or tap for the full solution



Q.2 The voltage and the current between A and B points shown in the circuit are _____.

[JEE Main 2026 (Online) 4th April Morning Shift]



- (1) 24 V, 12 A (2) 24 V, 4 A
 (3) 18 V, 12 A (4) 27 V, 4 A

Scan or tap for the full solution



Q.3 A regular hexagon is formed by six wires each of resistance $r \Omega$ and the corners are joined to the centre by wires of same resistance. If the current enters at one corner and leaves at the opposite corner, the equivalent resistance of the hexagon between the two opposite corners will be

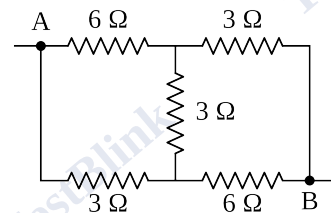
[JEE Main 2026 (Online) 24th January Evening Shift]

- (1) $\frac{3}{5}r$ (2) $\frac{4}{5}r$ (3) $\frac{5}{8}r$ (4) $\frac{3}{4}r$

Scan or tap for the full solution


Section B (Numerical) — 1 question

Q.4 The equivalent resistance between the points A and B in the following circuit is $\frac{x}{5} \Omega$. The value of x is _____. [JEE Main 2026 (Online) 28th January Morning Shift]



Scan or tap for the full solution


ANSWER KEY
Section A (MCQ) — 3 questions

Ques.	1	2	3								
Ans.	1	2	2								

Section B (Numerical) — 1 question

Ques.	4										
Ans.	21										