

**JEE MAIN CURRENT ELECTRICITY — DRIFT OF ELECTRONS AND
ORIGIN OF RESISTIVITY, MOBILITY — PYQS**

Max. Marks: 4

Questions: 1

Section B (Numerical) — 1 question

- Q.1** A cylindrical conductor of length 2 m and area of cross-section 0.2 mm^2 carries an electric current of 1.6 A when its ends are connected to a 2 V battery. Mobility of electrons in the conductor is $\alpha \times 10^{-3} \text{ m}^2/\text{V s}$. The value of α is :
(electron concentration = $5 \times 10^{28} / \text{m}^3$ and electron charge = $1.6 \times 10^{-19} \text{ C}$)

[JEE Main 2026 (Online) 22nd January Evening Shift]

Scan or tap for the
full solution**ANSWER KEY**

Ques.	1																		
Ans.	1																		