Magnetic Materials
Previous Year JEE Problems

2 Q. The coercivity of a small magnet where the ferromagnet gets demagnetized is $3 \times 10^3 \text{Am}^{-1}$. The current required to be passed in a solenoid of length 10 cm and number of turns 100, so that the magnet gets demagnetized when inside the solenoid, is : (1) 3A (2) 6 A (3) 30 mA (4) 60 mA

[JEE(Mains) – 2014]

Sol. Coercivity = $B / \mu_0 = 3 \times 10^3 = n \times I$

$3 \times 10^3 = 1000 \times I$

$I = 3 \times A$