Homogenous linear magnetic material. The conduction current density vector at a point of a homogenous magnetic material of relative permeability μ_r is $\mathbf{J}$. The curl of the magnetic flux density vector, $\nabla \times \mathbf{B}$, at that point equals

(A) $\mu_0 \mathbf{J}$.
(B) $\mu_r \mu_0 \mathbf{J}$.
(C) $\mu_r \mathbf{J}$.
(D) $(\mu_r - 1)\mathbf{J}$.
(E) $\mathbf{J}$.
(F) 0.

Solution: (B)
Answer: (B)