Magnetic flux density inside a bar magnet. Using the magnetization vector, $\mathbf{M}$, of the bar magnet from the previous question, the magnetic flux density vector inside the magnet can be expressed as

(A) $\mathbf{B} = \nabla \times \mathbf{M}$.
(B) $\mathbf{B} = -\mathbf{M}$.
(C) $\mathbf{B} = \mathbf{M}a^2$.
(D) $\mathbf{B} = \mu_0 \mathbf{M}$.
(E) $\mathbf{B} = -\mu_0 \mathbf{M}$.
(F) $\mathbf{B} = 0$.

Note: there is not external magnetic field.

Solution: (D)
Answer: (D)