Magnetic vector potential of a straight wire conductor. A steady current is established in a straight metallic wire conductor in a nonmagnetic medium. The magnetic vector potential due to this current at an arbitrary point in space that is not on the wire axis is

- (A) Parallel to the wire.
- (B) Perpendicular to the wire.
- (C) None of the above.
- (D) Depends on the particular position of the point with respect to the wire.

Solution: (A) Answer: (A)