
Electric potential at a point in a uniform electric field. Consider a region with a uniform electrostatic field of intensity E , as shown in Fig.Q1.6. If the electric scalar potential at the point A is zero ($V_A = 0$), the potential at the point B, given the notation in the figure, equals

- (A) $V_B = Ed$.
- (B) $V_B = Ed \sin \alpha$.
- (C) $V_B = -Ed \sin \alpha$.
- (D) $V_B = Ed \cos \alpha$.
- (E) $V_B = -Ed \cos \alpha$.
- (F) $V_B = 0$.

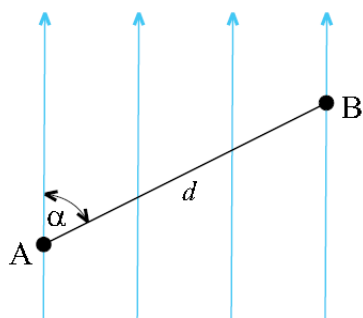


Figure Q1.6 Points A and B in a uniform electric field; for Question 1.7.

Solution: (E)

Answer: (E)