Half-positive, half-negative finite line charge. A line charge of finite length in free space has a density Q' ($Q' > 0$) along one its half and $-Q'$ along the other, as depicted in Fig.q1.4. The associated electric field intensity vector **E** at a point M equally distant from the line ends is

(A) as in Fig.Q1.4(a).
(B) as in Fig.Q1.4(b).
(C) as in Fig.Q1.4(c).
(D) as in Fig.Q1.4(d).
(E) zero.

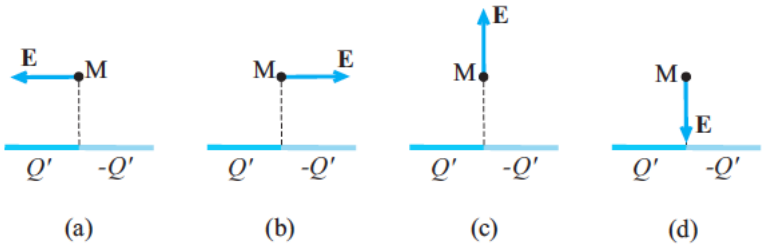

Figure Q1.4 Half-positive, half-negative line charge of finite length; for Question 1.4.

Solution: (B)
Answer: (B)