Induced emf and electric field along a circular loop. Consider the induced electromotive force, e_{ind}, and induced electric field intensity, E_{ind}, along the loop in Fig.Q6.4. If the radius of the loop is doubled (becomes $2b$), while both a and $\Phi(t)$ are not changed, we have that

(A) both e_{ind} and E_{ind} double.
(B) both e_{ind} and E_{ind} remain the same.
(C) both e_{ind} and E_{ind} are halved.
(D) e_{ind} remains the same and E_{ind} is halved.
(E) e_{ind} doubles and E_{ind} remains the same.

Solution: (D)
Answer: (D)