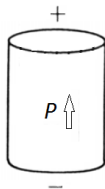
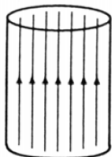


## Displacement field $D$

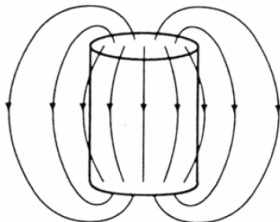
A bar electret is an electric analog to a magnet and consists of a short cylinder with a uniform polarization  $P$  parallel to its axis. There exists no free charge in the system. Sketch the displacement field lines for such an object.



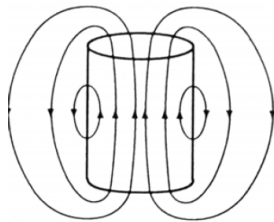
(a)



(b)



(c)



(d) None of the above.

(e) The displacement field  $D$  is zero.

(f) I don't know.