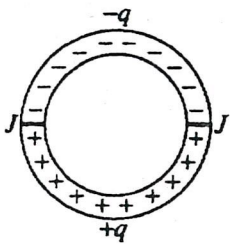
36. From the electric field vector at a point, one can determine which of the following?

I. The direction of the electrostatic force on a test charge of known sign at that point
II. The magnitude of the electrostatic force exerted per unit charge on a test charge at that point
III. The electrostatic charge at that point

(A) I only
(B) III only
(C) I and II only
(D) II and III only
(E) I, II, and III



37. A circular ring made of an insulating material is cut in half. One half is given a charge $-q$ uniformly distributed along its arc. The other half is given a charge $+q$ also uniformly distributed along its arc. The two halves are then rejoined with insulation at the junctions J, as shown above. If there is no change in the charge distributions, what is the direction of the net electrostatic force on an electron located at the center of the circle?

(A) Toward the top of the page
(B) Toward the bottom of the page
(C) To the right
(D) To the left
(E) Into the page

38. The net electric flux through a closed surface is

(A) infinite only if there are no charges enclosed by the surface
(B) infinite only if the net charge enclosed by the surface is zero
(C) zero if only negative charges are enclosed by the surface
(D) zero if only positive charges are enclosed by the surface
(E) zero if the net charge enclosed by the surface is zero